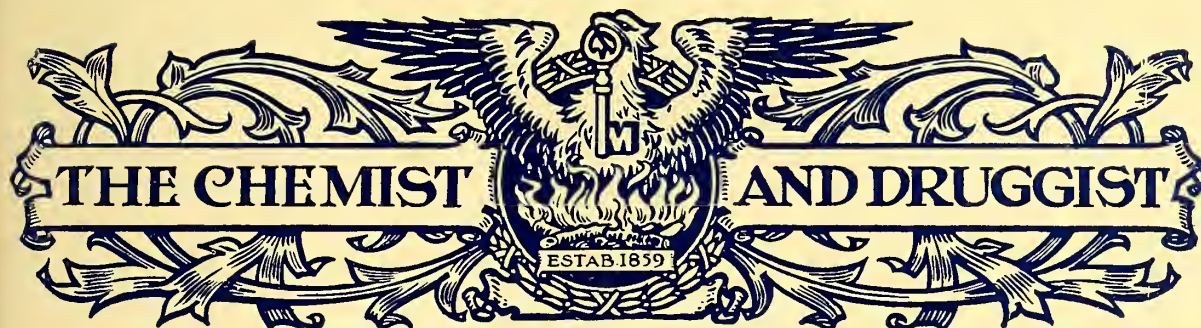






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No. 2597.

NOVEMBER 16, 1929.

Vol. CXI.



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(Ammonium ortho-iodoxybenzoate)

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makes 1 gallon  
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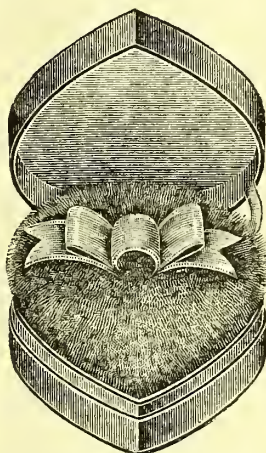
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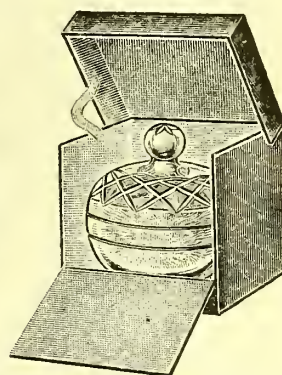


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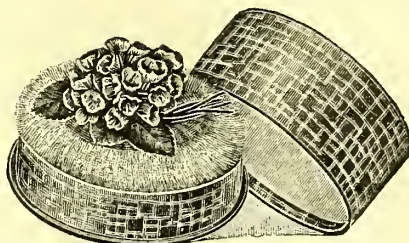
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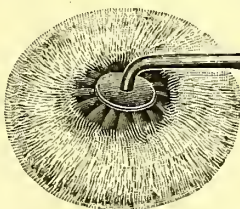


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LONG HANDLED PUFFS  
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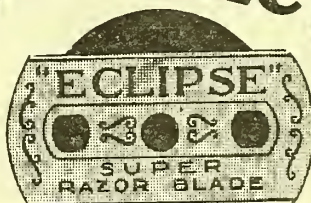
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**Try this  
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An ideal shave is assured,  
even in the case of stiff  
beards and tender skins,  
by using

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FOR STIFF  
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1/8

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JAMES NEILL & CO. (SHEFFIELD) LTD.,  
Crucible Steel Manufacturers, SHEFFIELD.

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# REDUCTION IN PRICE

# 1/6

SIZE  
NOW

# 1/3

**This Price Reduction takes  
effect from the 16th inst.**

1. Kindly note that there is no change in the percentage terms offered to the wholesale and retail trade hitherto.
2. Will you kindly return all stock of the 1/6 tubes on hand for credit and exchange, or alternatively favour us by placing an order for 1/3 tubes, then return your stock of 1/6 tubes subsequently?
3. We also invite you to examine all stock of the 2/- size and return, for exchange, tubes (if any) packed in cartons with a batch number below 441 (the batch number is stamped on the inside flap of the carton). We advise that all Batches prior to 441 were manufactured many months ago, and as we have since perfected the formula and openings of the tube, we desire to withdraw any old style tubes in circulation.



*All returns are to be made to*  
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Tileryard Road, York Road  
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After whom LISTERINE ANTISEPTIC was named nearly 30 years ago, was one of the great benefactors of all time. By his work with antiseptics he proved that infection could be prevented and millions of lives have been saved by his discovery.



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2 doz.	7 oz.	3. each	27. doz.
1 doz.	14 oz.	5 6 each	49 6 doz.

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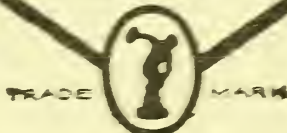
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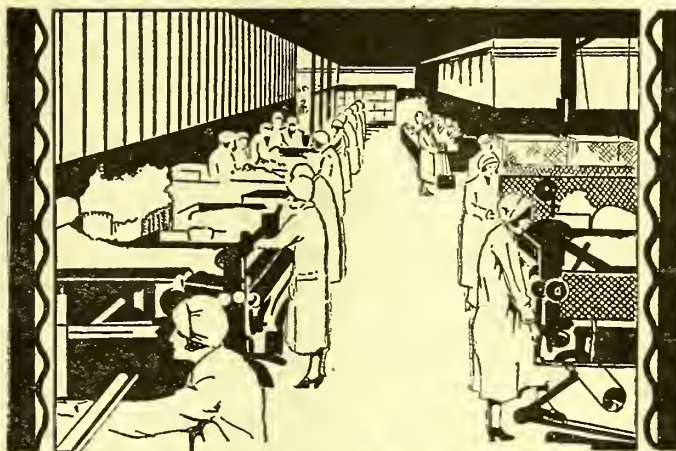
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**S. Maw, Son & Sons, Ltd.,**  
Aldersgate St., London,  
and Barrow.



# Maw's Page



## SPOTLESS

The cleanliness of Maw's Surgical Dressings Mills is almost painful. One hesitates to touch anything or even to walk across the floor in case one should leave a foot mark or finger print to mar the spotlessness of it all. There isn't a speck of dust anywhere, and one could literally eat off the floor. The workers are completely clad in white, and in the special sterilizing chambers even the air is purified.

Of course cleanliness is not everything in the manufacture of Surgical Dressings, but it is a great deal, and the cleanliness of Maw's Mills is just one indication of a general policy. This policy combines knowledge, experience, modern and efficient plant, careful workmanship and rigid supervision, to produce surgical dressings which will give satisfaction to their users and enhance the reputation of the pharmacist who sells them.

*Stock, display and sell Maw's  
Dressings for profit and prestige.*

**S. Maw, Son & Sons, Ltd.,**  
Aldersgate St., London,  
and Barnet.





# FOUR FAMOUS FOODS

## FROM THE HOUSE OF

# ARMOUR



### *Armour's* EXTRACT of BEEF

This product is suitable for the kitchen and sick-room, is excellent for making Gravies, Stews, Beef Teas, and is renowned for its strengthening properties.

Packed in 1-oz., 2-oz., 4-oz., 8-oz., 16-oz.,  
3-lbs., 7-lbs., 10-lbs., 14-lbs., 28-lbs.

### *Armour's* FLUID BEEF

This preparation is suitable wherever skilfully seasoned Fluid Beef is required for making Bouillon, Soups, Stews, and Beef Tea.

Packed in 2-oz., 4-oz., 8-oz., 16-oz., 5-lbs.,  
7-lbs., 10-lbs., 14-lbs., 28-lbs.

### *Armour's* BEEF CUBES

These have the real Beef flavour, are manufactured from genuine Beef Extract with suitable seasoning added. This is an exceptionally popular line with the Public and shows an adequate profit to the Retailer.

Packed in 6's, 12's, 50's, 100's, 200's, 400's.

### *Armour's* BEEF JUICE

This preparation is prepared by the cold process, is exceptionally stable, retails to the Public at 2/6d., and gives the Retailer a handsome profit.

Packed in 2½-oz., 8-oz., 16-oz., 80-oz.

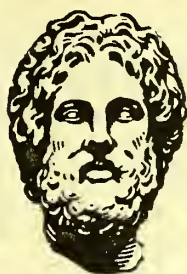
Information concerning any of the above preparations will be forwarded to you on receipt of your further communication.

LABORATORY DEPARTMENT  
**ARMOUR AND COMPANY**  
LIMITED

ARMOUR HOUSE, St. MARTIN'S-LE-GRAND,  
LONDON, E.C.1.

TELEGRAMS: "ARMOSATA-CENT," LONDON.  
TELEPHONE: NATIONAL 2424.





(Aesculapius)

## HEPATEX

HEPATEX is now recognised to be the most convenient form of Liver Extract for oral administration in the treatment of Pernicious Anæmia, and also the severe anæmias such as accompany or follow pregnancy.

Prepared in accordance with a special process evolved in Evans' Biological Institute from fresh and healthy livers, it is ensured that the whole of the therapeutic principles are contained in the final product. It is a palatable liquid extract which can be taken undiluted in one drachm doses, each drachm containing the equivalent of 2-oz. of fresh liver. Alternatively, the method of taking HEPATEX may be varied either by diluting it with water or mixing it with soup or beef tea. The addition of HEPATEX to these latter rather tends to improve the flavour.

*Supplied in 4-oz. bottles, containing the equivalent of 64-oz. of Fresh Liver, which is sufficient for eight days full treatment.*

*Price 12/- per bottle  
subject*

Prepared at  
*Evans' Biological Institute by*

**EVANS SONS LESCHER & WEBB, LTD.**

LIVERPOOL

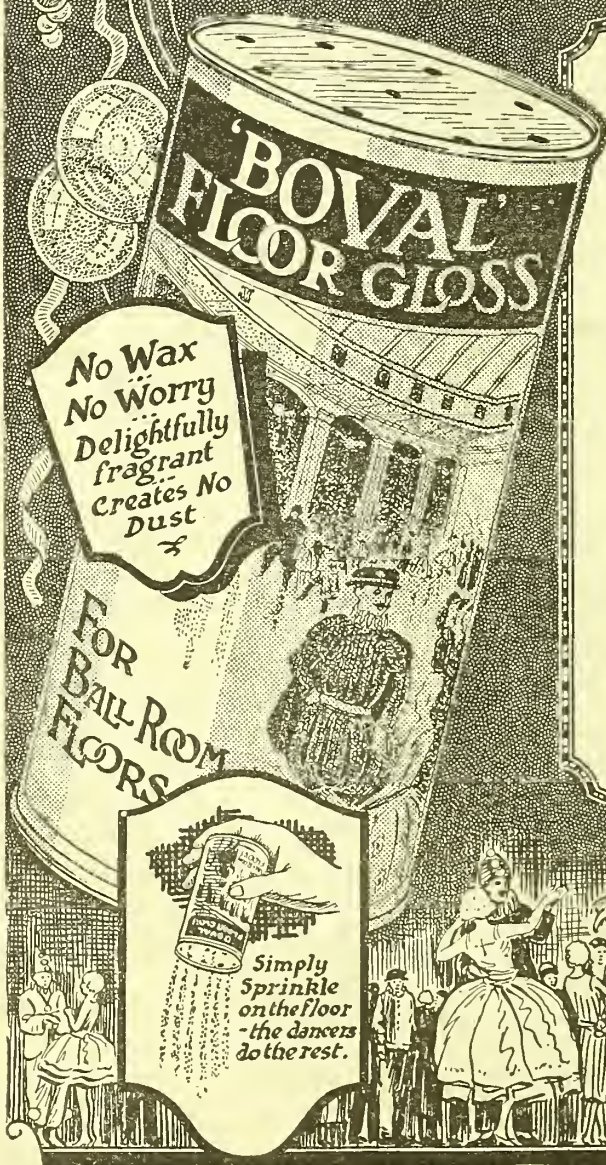
DUBLIN

LONDON



For a **PERFECT** dance floor  
you can confidently recommend -

# BOVAL FLOOR GLOSS



No Wax  
No Worry  
Delightfully  
Fragrant  
Creates No  
Dust

FOR  
BALL-ROOM  
FLOORS

Simply  
Sprinkle  
on the floor  
- the dancers  
do the rest.

**PREPARE**

for the

**DANCING SEASON**

by displaying

"BOVAL"

**FLOOR GLOSS**

Packed in beautifully decorated  
sprinkler-top containers.

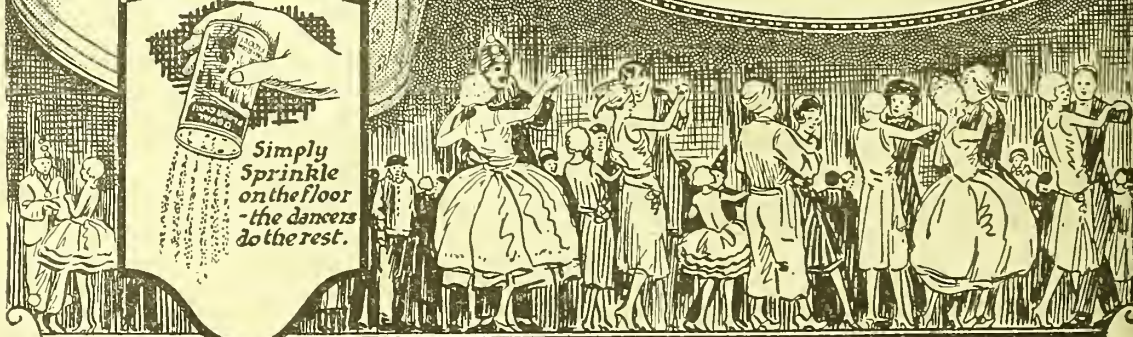
Write for display terms.  
£5 order carriage paid.

1/6 size	...	...	12/- doz.
2/6 "	...	...	20/- "

(P.A.T.A.)

Stocked by London Wholesale Houses.

**JAMES WOOLLEY  
SONS & CO., LTD.  
MANCHESTER.**





*"Sales ahead"*

AYRTON'S famous Emulsion, assisted by their equally famous display and sales schemes

*This fine model for Window Display*

# Cream Emulsion of COD LIVER OIL (With Hypophosphites)

Size	33%		25%		33%
	Eight styles of labels		Eight styles of labels		"Fleet Brand" Cartoned per doz.
	per doz.	gr. lots	per doz.	gr. lots	
OZS.					
4	7/6	7/3	7/3	7/-	8/9
6	9/3	9/-	8/9	8/6	10/6
8	11/-	10/9	10/3	10/-	12/6
12	14/6	14/-	13/6	13/-	16/3
16	17/-	16/6	15/6	15/-	19/-
20	20/6	20/-	18/6	18/-	—
24	23/6	23/-	21/6	21/-	—
32	33/6	32/6	30/6	29/6	—

Buyer's name and address on three dozen or more.

Special prices for contract quantities.

## FISHERMAN MODEL.

26 inches high, oil-painted in natural colours, is given gratis with all first orders for one gross.

AYRTON, SAUNDERS & CO., LTD.,  
Hanover Street, LIVERPOOL, Eng.

Our famous LIGHTHOUSE MODEL is also available for those who prefer it, or desire an alternative window display.

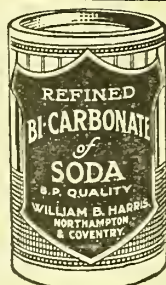




## ROBINSON'S of CHESTERFIELD for CARDBOARD BOXES

ROUND · OVAL · SQUARE · FOLDING

ROBINSON & SONS LTD.  
CHESTERFIELD & LONDON



## BEADED BOXES

The boxes illustrated above are finding increasing favour amongst chemists. They are dust-proof and air-tight and of a very attractive appearance. Fitted with a flanged metal lid which is easily lifted out they form a very useful container.

Blank panel on reverse side for printing in Customer's name and address.

## ROBINSON & SONS, Ltd.

Manufacturers of ROUND, OVAL, SQUARE AND FOLDING  
CARDBOARD BOXES.

## CHESTERFIELD

## A REMINDER!

THAT YOU MAKE FULL  
USE OF OUR BROCHURE

## "SUGGESTIONS FOR SEASONABLE GIFTS"

AS A MEANS OF INTRODUCING  
APPROPRIATE GIFT LINES TO  
YOUR CUSTOMERS.

**KEEP IT HANDY ON YOUR  
FRONT COUNTER!!**

IF YOU HAVE NOT HAD A COPY  
PLEASE SEND US A POSTCARD

## "NEWBERYS"

(F. NEWBERRY & SONS LTD)  
CHARTERHOUSE SQUARE

CARDIFF  
CRICHTON PLACE

LONDON, E.C.1

LIVERPOOL  
COLLEGE LANE

## Christmas Window Posters, Showcards, & Window Decorations

will give that finishing touch to convince the potential buyer that yours are the goods for Christmas presents. Illustrated List, in colours, No. C.D. 1150, showing tickets, posters, window slips, and all decorations applicable to the festive season, free on mention of this journal.

**DUDLEY & CO. LTD.** 451 HOLLOWAY RD.  
LONDON, N.7.  
City Showrooms—65-66 FIVE STREET, E.C.

## NURSE HARVEY'S MIXTURE

A safe, simple and reliable remedy for Children's Ailments is advertised so extensively in the daily and weekly Press as to bring mothers to the retailer without effort on his part.

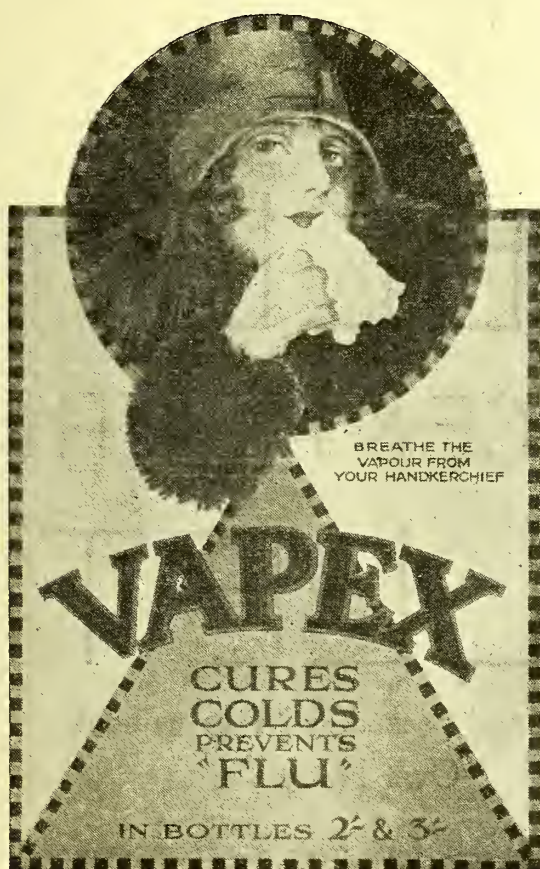
The selling has been done before the mother reaches the chemist, and, having supplied her, it is only common sense to claim she will buy other family necessities from him. Moreover, the continuous demand for it produces a quick turnover.

For Direct Terms apply to—

## OSCAR SCRUTON & CO., YORK



*This card will look well  
on your counter*



"VAPEX" always pays well for a place on the counter. This show-card will make an effective little display easy to arrange. Just one or two outers, a few cartons, if you like, and the show-card—that is all.

Clean and bright, quickly set out, easily dusted, occupying little room, telling the story at a glance, linking up the pharmacy with a comprehensive scheme of press advertising—these are some of the reasons why a "Vapex" display is so much appreciated on both sides of the counter.

#### BONUS DISPLAY TERMS

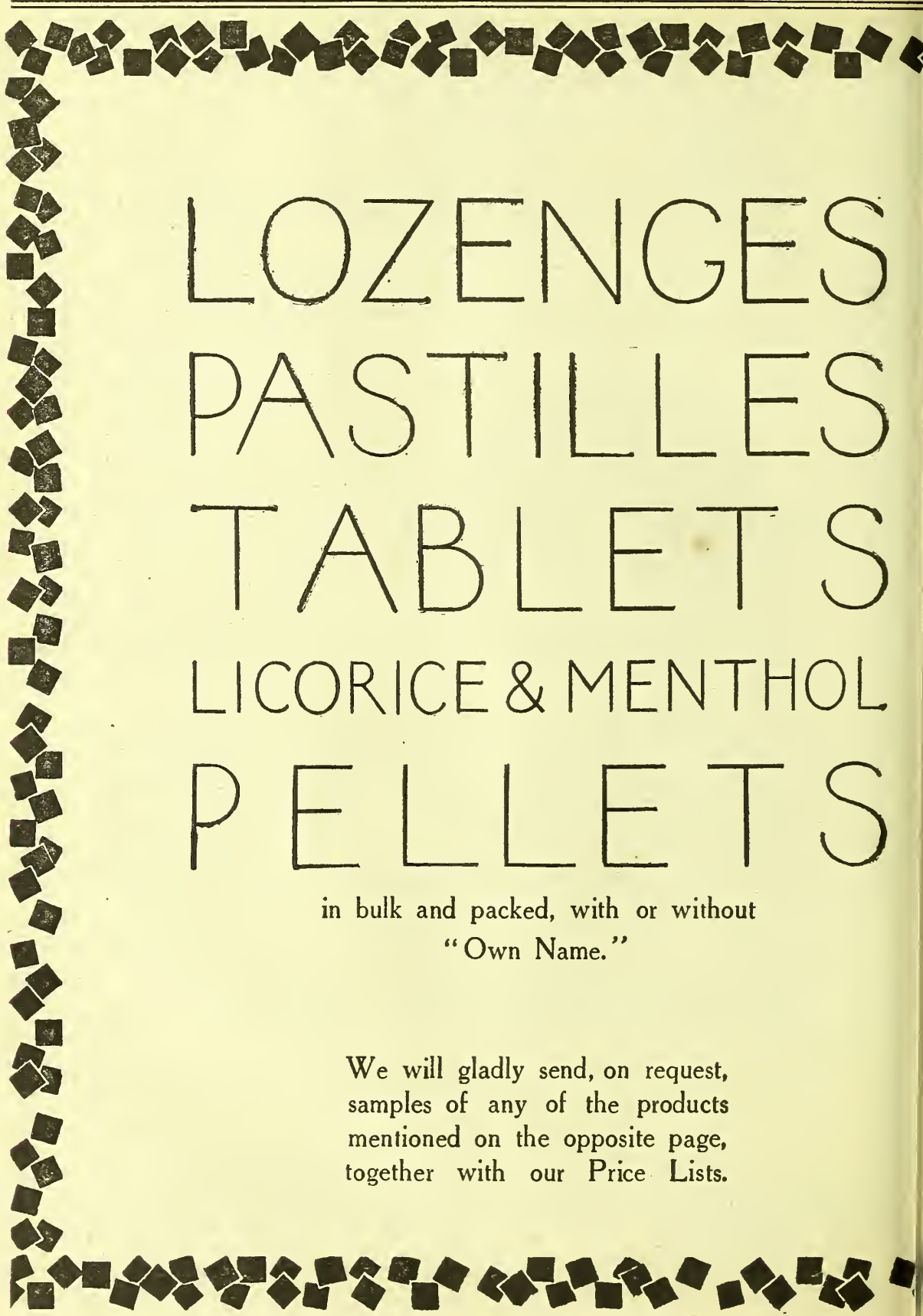
If you are not already acquainted with the special Window display terms now in operation please write for full particulars.

To EXPORT BUYERS—All orders and enquiries should be addressed to our Sole Export Agents  
Wm. ALFRED JONES Ltd., West India House, Liverpool.

THOMAS KERFOOT & CO LTD  
BARDSLEY VALE, LANCASHIRE,  
& Bardsley House, London, N1  
ESTABLISHED 1797.

D/435

COPYRIGHT



# LOZENGES PASTILLES TABLETS LICORICE & MENTHOL PELLETS

in bulk and packed, with or without  
"Own Name."

We will gladly send, on request,  
samples of any of the products  
mentioned on the opposite page,  
together with our Price Lists.



**Glossettes**  
(Licorice & Menthol)  
**4 $\frac{1}{2}$ d. & 9d.**  
TINS.  
Cash or Goods  
Bonus for  
Window Display

**Glossettes**  
**BULK**—with  
free cartons  
(3d.) for filling  
Window Show  
Terms

**DEVON  
VIOLET  
CACHOUS**  
3<sup>d.</sup> tins.

**IODISED  
THROAT  
LOZENGES**  
**8 $\frac{1}{2}$ d. & 1/3**  
tins.  
Very profitable.

**MINTOIDS**  
Curiously Strong  
**PEPPERMINTS**  
5<sup>d.</sup> tins,  
and bulk

**Glycerine  
Lemon and  
Honey  
Pastilles**  
per 2<sup>d.</sup> oz.  
Free cartons, etc.

**PYRAMIDS  
for COUGHS**  
(moulded pastilles)  
per 2<sup>d.</sup> oz.  
Free Cartons  
and Display

**BRONCHIAL  
LOZENGES**  
**9d. & 1/6**  
tins.  
Show matter.  
Free samples with "own  
name" leaflets.

**PASTILLES**  
**2oz. & 4oz. tins**  
(own name)  
Antiseptic  
Glycerine and  
Black Currant  
Eucalypt. and  
Menthol, etc.

**ASPIRIN  
& CASCARA  
TABLETS**  
25's, 50's, & 100's  
Cartoned,  
"own name"

**6d. Bags**  
(Cellophane)  
Peppermints,  
Euc. & Menthol  
Past.,  
Fruit Pastilles,  
Glyc. Lemon &  
Honey Pastilles,  
Creme de  
Menthe, etc.  
Astonishingly  
successful.

**ASPIRIN  
TABLETS**  
Cartoned  
wallets of 27.  
An entirely new  
departure.  
Outside competition.

**ERNEST JACKSON & CO. LTD.**  
**CREDITON. DEVON.**

London Office  
Plantain Place.  
Crosby Row.  
Boro. S.E.  
Phone. ROP. 2668

Telephone  
CREDITON 10  
Telegrams  
JACKSON. CREDITON

**OIL of LEMON**  
**SOLUBLE OIL of LEMON**  
**TERPENELESS OIL of LEMON**  
**SESQUITERPENELESS OIL of LEMON**



The high standard of **QUALITY** invariably maintained by each of these Lemon products is such as to ensure true **ECONOMY** in use—as well as the maximum of effectiveness for its individual purpose. Therefore, *if it's Lemon, ask*

**White, Tomkins & Courage Ltd.**  
**REIGATE, Surrey.**

Telephone : Reigate 480

Telegrams : Esswhite, Reigate.



BY APPOINTMENT

**GUARANTEED PURE**  
**ENGLISH**  
**PEPPERMINT OIL**

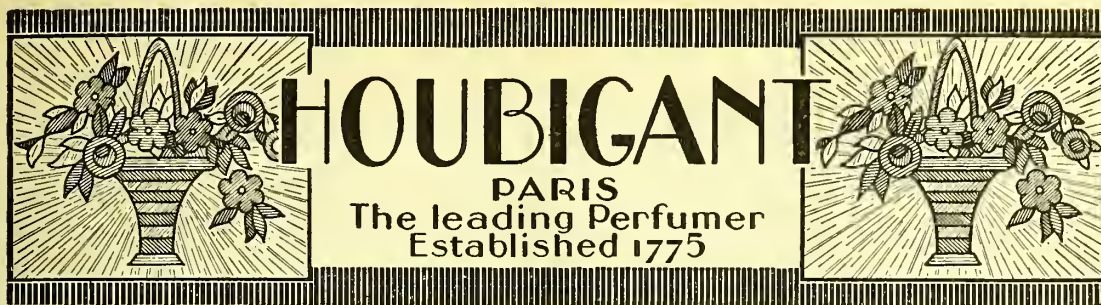
Grown & Distilled from Mitcham Plants

By

**Chivers & Sons Ltd.,**  
**Histon, Cambridge, England.**

SAMPLE AND QUOTATION ON REQUEST FROM THE SOLE SELLING AGENTS  
**BRUCE STARKE & CO., 16 WATER LANE, GREAT TOWER ST., LONDON, E.C.3**





## HOUBIGANT

Introduces

### "BOIS DORMANT"

(Woodland Dream)

A light yet lasting  
Perfume of exotic  
charm.

To retail at

13/6, 26/-, 48/-  
per flacon.

Face Powder  
per box - 2/-

### "AU MATIN"

An established favourite Per-  
fume in a new reduced size.

To retail at - - - 12/-

In larger sizes - 23/-, 46/-, 52/6

Face Powder - - per box 3/3

Write for Xmas list to—

PARFUMERIES DE PARIS, LTD.  
LONDON, W.3



# SUCCESS & SERVICE

The secret of our success has been the production of original novelties, together with reliable quality, competitive prices and second-to-none service. Increasing business year by year demonstrates that our goods and service are right. We are specialists in the manufacture of powder puffs for the wholesale and export trades.

**AT YOUR SERVICE**  
— ALWAYS

SPENCER  
BROTHERS

39 & 40 SHOE LANE  
LONDON, E. C. 4

*The firm with modern ideas.*



TELEPHONE:  
CENTRAL 3469.

TELEGRAMS:  
"SACHAPUFF, LUD, LONDON."

## A NEW PACKING FOR CALVERT'S Carbolic Toilet Soap



ONE DOZEN 6d. TABLETS IN  
NEAT COUNTER DISPLAY BOX

List price 4/5 per box.

As the usual 3-tablet boxes (list price 13/6 per dozen boxes) will still be available, customers are requested to certify in their orders which form of packing they desire.

F. C. CALVERT & CO., Ltd., MANCHESTER



A  
KEEN  
BLADE  
AT A  
KEEN  
PRICE

The Blade that SELLS as it SHAVES—  
"LIKE GREASED LIGHTNING!"

Obtainable from all Leading Wholesalers.

Dept. C.D. "Wanle" Distributors:  
c/o ROEBUCK'S ADVERTISING SERVICE  
Salisbury Square House, Salisbury Sq., Fleet St., London, E.C. 4

## Offer this

When customers ask for a colour-restorer for grey hair, or a tonic to stop falling or to promote growth, offer

**MORGAN'S POMADE**

You may do so in full confidence that it will perform what it promises. 35 years' reputation, a world-wide trade, and thousands of testimonials support its claims to genuine merit.

Retail 1/9 and 3/3 per pot.  
Wholesale 14/- and 26/- per doz.

THE MARIE ANTOINETTE CO. 149 JUNCTION ROAD  
LONDON, E. 19





# 17 $\frac{1}{2}$ %

## EXTRA DISCOUNT

on

### FAST SELLING TOKALON LINES

for

# XMAS 1929

WRITE  
NOW FOR  
DETAILS

# TOKALON

## XMAS BONUS OFFER

We offer two classes of Standard Parcels of fast-selling Tokalon preparations including a generous bonus of free goods. This offer shows an **extra profit** on cash invested of:—

OVER 13% EXTRA ON STANDARD PARCEL No. 1  
OVER 17 $\frac{1}{2}$ % EXTRA ON STANDARD PARCEL No. 2

**MAKING A TOTAL PROFIT ON  
CASH INVESTED OF**

**61% ON STANDARD PARCEL No. 1**  
**65 $\frac{1}{2}$ % ON STANDARD PARCEL No. 2**  
on preparations the sale of which is guaranteed.

### —STANDARD PARCEL No. 1—

Including Poudre Tokalon, Crème Tokalon Skin Foods, Compacts			
Retail Value of Goods	-	-	88/6
Cost of Order	-	-	54/11
Your Profit (61·15 per cent.)			<u>33/7</u>

### —STANDARD PARCEL No. 2—

Including Poudre Tokalon, Crème Tokalon Skin Foods, Compacts			
Retail Value of Goods	-	-	193/-
Cost of Order	-	-	116/6
Your Profit (65·67 per cent.)			<u>76/6</u>

*Any number and combination of Standard Parcels may be ordered so long as the total trade value does not exceed £23. 6s.*

**Send a postcard NOW for folder  
giving full details of Bonus Offer.**

*(Expires December 21st, 1929.)*

*Write Now.)*

## TOKALON LIMITED

212-213 GREAT PORTLAND STREET, LONDON, W.1



# DEARBORN (1923) LTD.

37 Gray's Inn Road, London, W.C.1

Telephone : HOLBORN 9669

## Toilet Specialties.

	Price per doz. to Retailer	Selling Price P.A.T.A.
<b>PILENTA SOAP</b> .. ..	10/-	1/-
A complexion soap.		
<b>PROLACTUM</b> .. ..	10/-	1/-
For the lips.		
<b>PARSIDIUM JELLY</b> .. ..	10/-	1/-
For wrinkles.		
<b>ALLACITE OF ORANGE BLOSSOM</b> .. ..	22/6	2/6
A dressing cream.		
<b>BORANIUM</b> .. ..	22/6	2/6
A hair tonic.		
<b>CLEMINITE</b> .. ..	22/6	2/6
For a facelotion.		
<b>COLLIANDUM (Powder &amp; Solide.)</b>	22/6	2/6
For a face tint.		
<b>PERGOL</b> .. ..	22/6	2/6
A deodorant.		
<b>TEKKO PASTE</b> .. ..	22/6	2/6
Camphor cream.		
<b>STALLAX</b> .. ..	13/6	1/6
For a shampoo.		
<b>JETTALINE</b> .. ..	22/6	2/6
For clearing the skin.		
<b>PHEMINOL</b> .. ..	31/6	3/6
A depilatory.		
<b>MENNALINE</b> .. ..	36/-	4/-
For the eyelashes.		
<b>MERCOLIZED WAX</b> .. ..	18/-	2/-
A face cream.		
<b>STYMOL</b> .. ..	31/6	3/6
For oily complexions and blackheads.		
<b>SILMERINE</b> .. ..	36/-	4/-
Hair-curling fluid.		
<b>BARSYDE</b> .. ..	22/6	2/6
Dandruff eradicator.		
<b>TAMMALITE</b> .. ..	22/6	2/6
For grey and faded hair.		
<b>LIQUID PERGOL</b> .. ..	31/6	3/6
To check excessive perspiration locally.		
<b>BICROLIUM</b> .. ..	22/6	2/6
For whitening the hands.		
<b>COCONOIDS</b> .. ..	31/6	3/6
For figure development.		
<b>SIPOLITE</b> .. ..	18/-	2/-
A new depilatory.		

### The Products of

Messrs. PARKER, BELMONT & CO.

<b>CLYNOL BERRIES</b> .. ..	36/-	4/-
For obesity.		
<b>SOFT PALERIUM</b> .. ..	45/-	5/-
For wrinkles.		
<b>LIQUID NAIL POLISH</b> .. ..	10/-	1/-
Brilliant and lasting.		

Stocked by ALL Wholesale Houses.

### FOREIGN AND COLONIAL DEPÔTS AND AGENCIES.

South Africa: LENNON, LTD., Cape Town, etc.  
SIVE BROS., & KARNOVSKY, LTD., Johannesburg.  
India: FRAMJEE & SON, Bombay.  
A. L. CHOUDRY, Calcutta.  
New Zealand: SHARLAND & CO., Auckland and Wellington.  
Irish Free State: MAY, ROBERTS & CO., LTD., Dublin.



## Out of stock means out of POCKET!

Tell a customer you are out of stock of ANZORA and you lose a sale—offer him a substitute and you lose a customer! No man who has used Anzora will believe there is anything so good. He *knows* there isn't. Therefore, not to be out of pocket, never be out of stock.

### TRADE TERMS

12/- doz. Retail at 18/-  
20/- " " 30/-

A supply of Attractive Show-cards and Cutouts for Window Display sent post free.



## ANZORA

*Masters the Hair!*

Anzora Cream for greasy scalps will not soil hat linings or pillows. Anzora Viola for dry scalps contains a little oil of violets.

If unobtainable from your wholesaler, write direct to—

ANZORA PERFUMERY CO. LTD., London, N.W.6

“ Just ask

your wife

to try a

# BÜTYWAVE SHAMPOO.”



# BOURJOIS'

LONDON

& PARIS



## 365 DAY SHAVING STICK

This amazingly successful line, combining quality and quantity in superlative degree, is

**P. A. T. A**  
PER **9<sup>D</sup>** STICK

### A Big Margin of Profit

This quick-selling line shows a profit on returns of nearly

**39%**

when purchased in small quantities, or

**44%**

if bought in 5 gross lots.

### HOW TO ORDER

Cat. No. 2776

66/- per gross (min. quantity 3 dozen.)

60/- " " (for quantities of 5 gross & upwards.)

and this retail price will be protected with the utmost vigour and vigilance.



The  
DISPLAY CARTON

A. BOURJOIS ET CIE., LTD., 4, WATER LANE, LONDON, E.C.4

*The above prices do not apply to the Irish Free State or the Colonies.*

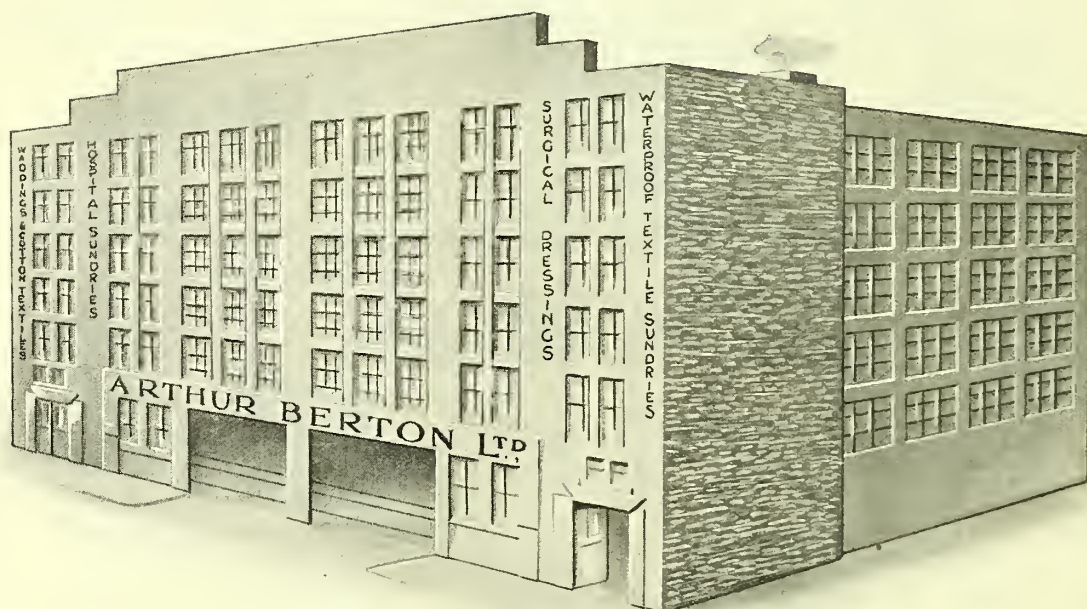
B B

# ARTHUR BERTON, Ltd.

'Phone:  
CLERKENWELL  
1346-7-8-9



Telegrams:  
AYBELIM FINSQUARE  
LONDON



## AN INVITATION

WE CORDIALLY INVITE OUR FRIENDS WHO ARE INTERESTED  
IN THE PRODUCTION OF SURGICAL DRESSINGS TO INSPECT  
OUR NEW FACTORY AND SHOWROOMS:—

**ARTHUR BERTON, Ltd.**  
**BRITANNIA HOUSE**  
**256-260 OLD STREET, E.C.1**



# ARTHUR BERTON, Ltd.

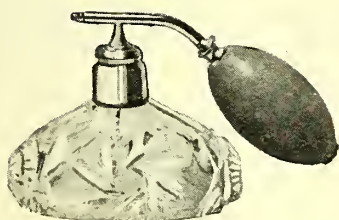
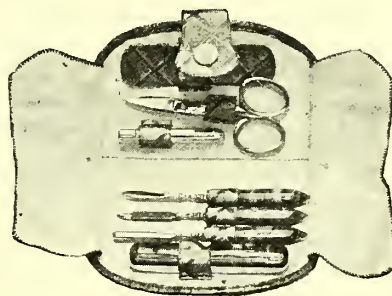
*Manchester Branch :*  
36 CHAPEL STREET.

'Phone : CENTRAL 6299.



*Glasgow Branch :*  
49 JAMAICA STREET.

'Phone : CENTRAL 4300.



WE ARE MAKING A SPECIAL SHOW OF SUNDRIES SUITABLE  
FOR THE XMAS TRADE. A VISIT WILL REPAY YOU

*NEW ADDRESS:—*

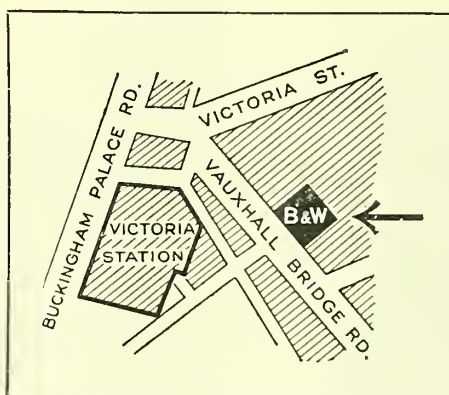
# **BROOKS & Warburton, Ltd.**

**232-240 VAUXHALL BRIDGE ROAD, S.W.1**

*Phone : Victoria 9652*

*Telegrams : "Amedrusto, Churton, London."*

□  
THE  
NEW  
CENTRE  
□



□  
FOR  
BETTER  
SERVICE  
□

*Everything in*  
***Patents & Proprietaries***  
*British and Foreign*

---

**SPECIAL DEPOT FOR:—**

G. W. Carnrick Co.  
Arlington Chemical Co.  
Pineoleum Co.

Sandoz Chemical Works  
Mead, Johnson & Co.  
Pyorrhocide



# Big Profits for You

## IN THE NEW

# VIVATONE

## RADIO-ACTIVE PREPARATIONS

## OUR FREE OFFER

For a fortnight's window display and a £5 order (made up in any of the increasingly popular VIVATONE lines) we send you an additional supply of VIVATONE goods to the full retail value of 20/- absolutely free. Attractive booklets and literature for your counter and display material for your

window will also be sent without charge. VIVATONE HAIR AND BEAUTY preparations are high class and are packed attractively. The prices compare more than favourably with similar lines. They will sell on sight to every girl and woman wanting high class preparations at moderate prices.

**£1**  
OF GOODS  
ABSOLUTELY  
**FREE**

## FULL LIST OF VIVATONE PREPARATIONS

	Costs	Sells at	
VIVATONE RADIO-ACTIVE HAIR RESTORER	60/- doz.	80/- doz.	<b>£5 PARCEL</b>
VIVATONE SHAMPOO POWDERS - (boxes of 6)	20/- "	30/- "	
VIVATONE BLACKHEAD & OPEN PORE CREAM (3oz.)	20/- "	30/- "	DIRECT—30 DAYS'
VIVATONE ANTI-WRINKLE CREAM - (2 oz.)	20/- "	30/- "	CREDIT OR
VIVATONE CLEANSING CREAM - (3 oz.)	20/- "	30/- "	THROUGH YOUR
VIVATONE CONTOUR JELLY - (1 oz.)	28/- "	42/- "	USUAL
VIVATONE ASTRINGENT LOTION	33/- "	54/- "	WHOLESALE.
VIVATONE SKIN FOOD - (2 oz.)	36/- "	54/- "	
VIVATONE FOUNDATION CREAM - (2 oz.)	24/- "	36/- "	
VIVATONE COMPLEXION POWDER (all shades) in attractive gold square boxes	24/- "	36/- "	

**"I Look Ten Years Younger."**

**Beauty Wisdom**

There is a secret of a youthful skin—chance in a flash, and a smooth skin. There is only one scientific way to retain youth and beauty—VIVATONE. All contain the beauty-active properties of the modern world.

**BLACKHEAD & OPEN PORE CREAM**

Summer sun, the dust and grime will clog your skin and make it look old. Blackhead and Open Pore Cream penetrates into the skin and cleanses the pores. Large jar, 10/-, 1/6.

**ANTI-WRINKLE CREAM**

And wrinkles are due to the loss of elasticity. This cream restores the skin's elasticity.

**VIVATONE RADIO-ACTIVE HAIR RESTORER**

INSIST on VIVATONE as a genuine RADIO-ACTIVE HAIR RESTORER.

**GREY HAIR BANISHED**

The problem of prematurely grey hair has been scientifically solved by VIVATONE RADIO-ACTIVE HAIR RESTORER. It has no claims to "magic." It is simply a tonic and stimulant which, by reason of its wonderful radio-active properties, brings back the natural colour of the hair—gradually—and without detection. A perfectly harmless preparation. Not a dye.

**FREE. INTERESTING BOOKLET SENT FREE ON REQUEST.**

**VIVATONE**

RADIO-ACTIVE HAIR RESTORER

PRICE 7/6 (Postage 2/6 extra) Plain Wrapper.

DIRECT FROM LABORATORIES.

ANDRE GIRARD ET CIE (ENG.), LTD.,  
St. Albans, Herts, England.

**FREE**

**Keep Your Hair Young**

**ONE BY ONE**

**PARIS SPECIALIST**

Jeanne Chevallier—the Beauty Specialist—solves a tonic problem for you. Simply follow the plan and you will see the result. Beauty Brandy Special Tonic will be the thing that gives you the hair you desire. I tell you how to bring back the hair you lost. A perfectly harmless preparation. Personal advice of the Beauty Counsellor is at your service today for booklet and ask for it.

**ONE BY ONE**

André Girard et Cie.

The original combined Cream and Powder

la **VELOUTY**

de **DIXOR** Paris



*The advertised line that you are asked for.*

NOW ON P.A.T.A.

Samples free upon receipt of trade card or billhead.

PRICES :—Full size pot -	21/- doz.	RETAIL 2/9
Super tube -	22/- "	" 3/-
Large tube -	14/- "	" 2/-
Medium tube	7/- "	" 1/-
Handbag tube	3/- "	" 6d.

*Made in four shades :*

WHITE, IVORY, NATURAL and OCHRE.

Obtainable from your regular Wholesaler or direct from the Sole British Agents

**DEBACQ & HARROP,**

68 Newman Street, Oxford Street, London, W.1.

*Sole Distributors for*

Northern Ireland : ROBERT MAYRS & CO., 43 Chichester Street, BELFAST  
Irish Free State : MAY ROBERTS & CO. LTD., Grand Canal Quay, DUBLIN

## Sunshine Remedies

INCLUDING THE NOW FAMOUS

ANTI-ACID TABLETS, "TOXINICON" for Rheumatic diseases  
GOLDEN-RAY SHAVING SOAP The only Soap with antiseptic Vaseline  
centre  
SOLEIL D'OR PERFUME & TOILET PREPARATIONS

London Chemists are invited to send their "Sun Ray"  
patients to our private rooms. Trained Staff in attendance

ASK FOR DETAILS.

Write for Descriptive Catalogue,

Sunshine Remedies, Ltd.

8 West Halkin Street, S.W.1

Telephone : Sloan 4133.



for Artificial Dentures  
Cleans and Preserves

6d. 3/10 doz. 1/- 7/6 doz.

Bonus Offer for window show :—Box of 3 doz. charged as 2.

WRITE FOR SAMPLES AND SHOWCARDS.

**NILTSIM LABORATORIES, 34 London Wall, E.C.2**



# SPECIAL PERMISSION

has been granted by our principals  
to allow the remarkably profitable

## CUTEX CHRISTMASTIDE OFFER

to remain open until Nov. 25th after  
which date it must definitely close.

Such an opportunity is presented only once  
per annum and is given on the distinct under-  
standing that at least a 14 days display is  
given to synchronise with the important Gift  
Set advertising taking place in Pictorial Daily  
Papers and Weekly and Monthly Magazines.

## 2/- CUTEX CUTICLE REMOVER FREE

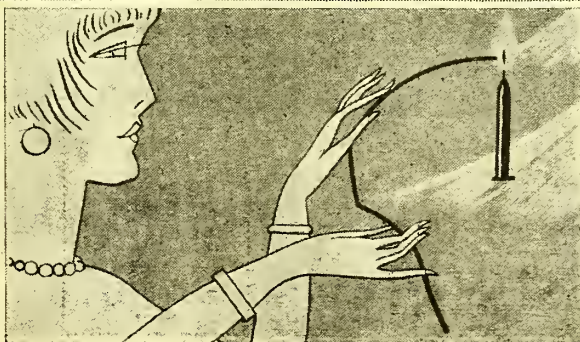
Half Dozen on 50/- orders.

One Dozen on 100/- orders.

plus display discount 5% and 7½% respectively on  
50/- and 100/- orders together with showcards, etc.

### MAKE OUT YOUR CHRISTMAS ORDER FROM P.A.T.A. LIST

and include a good assortment of the popular Christmas  
Sets, Nos. 16, 17, 18, 19 and 25—the three first being in  
their wonderful "Christmas Wrap," as illustrated, and  
are the premier feature of Cutex current publicity.



No Bonus Orders accepted after 25th November.

# SPHERE SUPERB POWDER PUFF

A new Puff made of Sylkie-down Velour. The pile on this beautiful puff is produced in such a way as to retain just sufficient powder to enable the user to apply it smoothly and evenly, without streaks, as is the case with coarser materials.

Supplied in assorted colours and sizes.

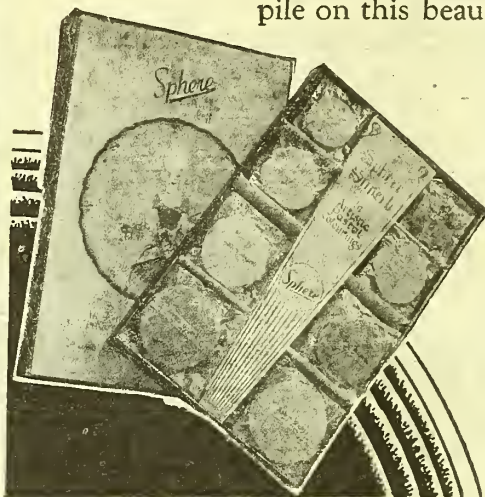
**ATTRACTIVE DISPLAY BOX.**

No. PF 50 as illustrated, 2 doz.  
in a box ... 7/6 per box.

Assorted Six Puffs each 2", 2½", 2¾",  
and 3¼" to the box.

Wholesale only:

FAIRE BROS. & Co., Ltd., Leicester.



## AEROFUME

Regd.

The well-known  
Air Disinfectant  
and Deodorant

Will be in great demand in the  
season approaching.

Regd.

**SEE TO YOUR  
STOCKS**

In Bottles 2/3, 3/6, 6/3.

Complete outfits (as illus.).  
Spray and Bottle of  
Aerofume 5/6.

Subject to 33½% discount.

Obtainable from own wholesaler.

Showcards & leaflets supplied.

**WALDEN, WALDEN & CO.**

15 Grape St., New Oxford St.,  
LONDON, W.C.1



## FILING COVERS

For The Chemist and Druggist Retail Price List.  
In Stout Cardboard with cords. Price 1/- each post free

The Chemist & Druggist, Publications Dept.,  
42 Cannon St., London E.C.4

Every bottle  
gives you  
**PROFIT 1/3**

and repeats always  
follow

Perm Brow, the new  
perfectly harmless  
liquid eyebrow beauti-  
fier, blackens eyebrows  
and lashes to an allur-  
ing darkness and being  
waterproof it stays on.  
Its unique qualities  
have influenced recom-  
mendation and repeat  
orders from almost  
every user. Get a stock  
to-day, and give it a  
display—profits will  
come easily.

Obtainable from all  
Wholesale Houses or  
direct from—

**MIRUS, LTD.,**  
West End Sales  
Office:  
53a Maddox St.,  
W.1.



Wholesale

**18/-**  
per doz.

Retail

**2/9**  
per bottle.



# MONSOL

BRAND

## IN THE TOILET



EXTENSIVE  
ADVERTISING  
NOW APPEARING

AMPLE STOCKS AVAILABLE  
of the new

★ **MONSOL TOILET SOAP**  
BRAND

8d. TABLETS

★ **MONSOL OINTMENT**  
BRAND

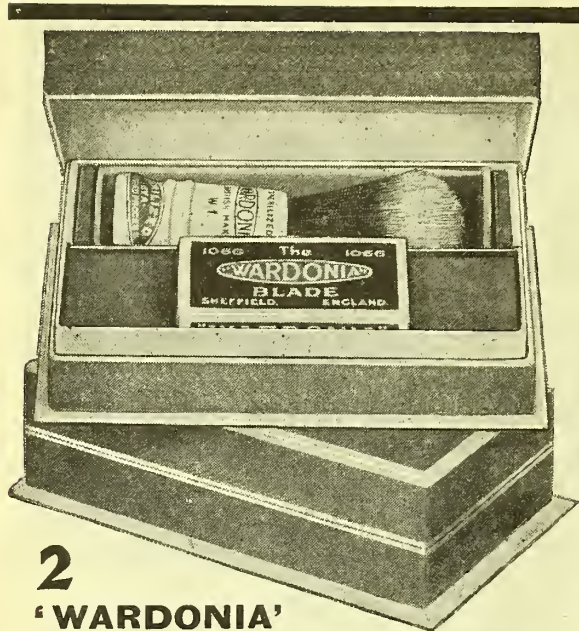
1/3 TINS      2/- POTS

APPLY FOR WINDOW TERMS TO:

**MONSOL DISTRIBUTING AGENCY**

168/172 Drummond Street, London, N.W.1.





2

## 'WARDONIA' 'RECORD' SELLERS!

Record Xmas sellers and bought for men the whole year through. Advertised to millions of men through the National and Provincial Press. Enclosed in stout container ready for posting. You simply buy the contents, not a penny extra charge for the handsome leatherette case and container.

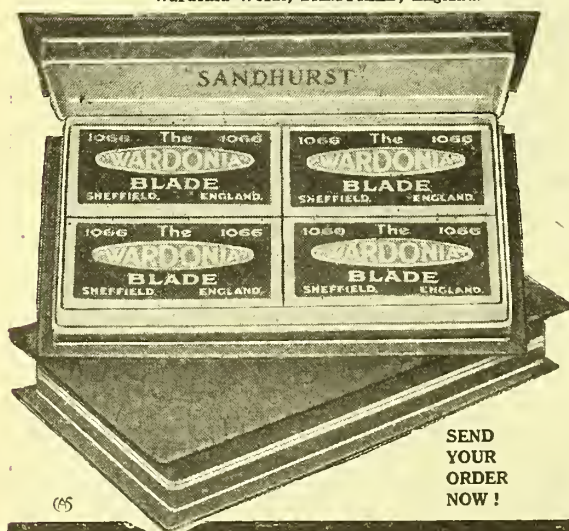
The "Windsor" Case (above)  
contains 2/6 Wardonia Shaving  
Brush and 2/6 Packet of War-  
donia "New Edge" Blades.

The "Sandhurst" Case (below)  
contains 20 Wardonia "New  
Edge" Blades (4 packets of 5)

**Both Retail at 5/- per Case.**  
Cost 40/- per dozen (showing 50% Profit on cost).

# WARDONIA NEW EDGE BLADES

Sole Makers: THOMAS WARD & SONS LTD.  
Wardonia Works, SHEFFIELD, England.



SEND  
YOUR  
ORDER  
NOW!

## KOTEX—AND THE PARTY SEASON

There has been a noticeable rise in the sale of KOTEX SANITARY PADS during recent months, for the reason that through our advertising thousands of women awoke to the realisation that old-fashioned towels must not be worn with modern clothes.

Women wear just as many light-coloured frocks in the winter as they do in the summer. And in the winter they more frequently attend dances and theatres, where protection is all-important to them. They entertain at their own homes, and go to parties at their friends'. They golf and play tennis nowadays almost as much in winter as in summer.

The need for comfortable and reliable protection is always present; and women who have once experienced the comfort of KOTEX will never return to old-fashioned methods or be satisfied with anything less perfect than KOTEX.

But YOU must do one thing immediately if you wish your share of this profitable business. You must make the purchase of KOTEX easy. Put a display of KOTEX in your window. Put the KOTEX STAND on your counter stacked with wrapped packages clearly priced—1s. packages one side and 2s. packages on the other. Women like to help themselves casually and simply hand you the money in an unconcerned manner. Help them this way and you will have cause to thank us for the hint, which, by the way, is the outcome of years of study and research into this difficult market.

If you need a Counter Stand we shall be glad to send you one. Don't forget to display the 1/- packages (containing six towels)—they suit a large number of purses that find the larger package beyond their means.

The usual striking KOTEX advertisements are appearing in the following Daily, Weekly, or Monthly publications:—

*Daily Mirror, Daily Sketch, Home Notes, Woman's Friend, Woman's Life, Woman's Companion, Woman's Way, Film Weekly, Home Chat, Woman's World, Home Companion, Woman's Weekly, Modern, Picture Show, Weldon's, Modern Woman, Modern Home, Woman and Home, Fashions for All, Home Fashions, Mab's Fashions, My Home.*

### KOTEX LIMITED

78 SALUSBURY ROAD, LONDON, N.W.6.

Please send me Kotex Metal Counter Rack (free of charge) so that I may adopt the wrapped package plan of selling.

NAME .....

ADDRESS .....

C. & D. 16.11.29 .....



# YE OLDE POTTE POURRI

No. 10  
21/- doz.

No. 11  
15/- doz.

No. 12  
24/- doz.

No. 13  
21/6 doz.

In  
single  
outers.



No. 14  
21/6 doz.

No. 15  
12/- doz.

No. 16  
12/- doz.

No. 17  
21/- doz.

In  
single  
outers.

**LORIMER - MARSHALL, LTD.**

12 TOWER HILL, LONDON, E.C.3.

Telephone : NEW CROSS 2119.

## COLOGNE for the BATH & TOILET

*Packed in two Styles*



5160

	4	8	16	32	oz.
	9/6	14/-	25/6	45/6	doz.

	10	20	40	oz.
	20/-	36/-	64/-	doz.



5161

*Showcards Supplied.*

Manufactured by

**WILLIAM TOOGOOD, LIMITED**

77, SOUTHWARK STREET, LONDON, S.E.1



# MASON PEARSON

## HAIR-BRUSH

*The Brush  
which is  
asked for*

There is only one hair-brush which is equally suitable for people of both sexes and all ages:—The "MASON PEARSON" Brush. It brushes much more quickly than any other brush. It brushes more efficiently. It cleanses the scalp more gently and thoroughly than any other brush. It disentangles long hair without tugging it, and restores the "set" to ruffled hair.

The reason is that all "MASON PEARSON" Brushes are made of the most perfect hair-brushing material—the black unbleached bristle of the Indian Wild-Boar—which, arranged by our special patented method in a pneumatic rubber cushion, makes the most perfect Hair Brush yet obtained.

The "MASON PEARSON" Brush is known and asked for everywhere by its name.

The brushes are made in eight models, in both "Military" and "Handle" styles, retailing from 3/6 to 18/6, all subject to generous discounts. Can be supplied through your usual wholesaler.



MASON PEARSON SELLING AGENCY, LTD., 59 NEW OXFORD ST., LONDON, W.C.1

## TATCHO

### THE HAIR RESTORER

PROMOTES, PRODUCES,  
BEAUTIFIES THE HAIR

TATCHO Laboratories, 5 Great Queen Street, London, W.C.2

Sample Size 6<sup>d</sup>

6 Bottles in Case for  
Counter Display,  
4/- PER DOZ.

1/3 size .. 12/6 per doz.  
2/9 size .. 26/- per doz.

## THE HOUSE FOR QUALITY IN PUFFS

NOVELTIES ALWAYS AVAILABLE

### COMPACT POWDERS

Specially Prepared.

Any Tint. Any Perfume.

F. SCHUTZE & Co., Ltd.

BLACK BULL WORKS, CALEDONIAN ROAD, LONDON, N 7



# Nuctone

## FOR GREY HAIR —

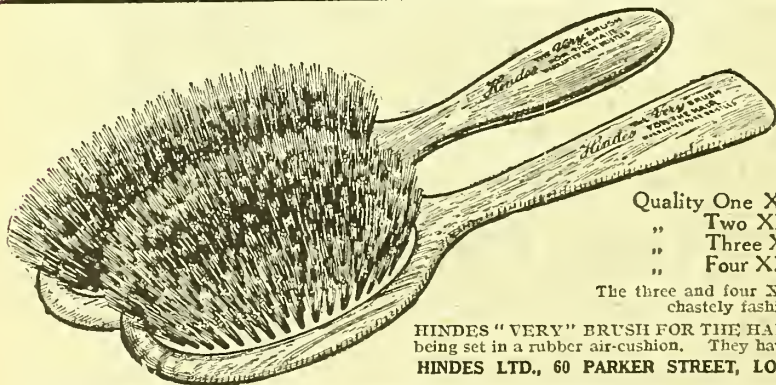
NUCTONE ECLAIRE, ECLAIRE CONCENTRE  
NUCTONE AND NUCTONE CONCENTRE

Order through your usual  
wholesaler, or from

J. C. GAMBLES & CO. LTD.  
211 BLACKFRIARS ROAD,  
LONDON, E.C.1

Manufactured by

STEWART, GOODALL  
& DUNLOP, LIMITED,  
4 DERING STREET,  
LONDON, W.1



## HINDES "VERY" HAIR BRUSH

Quality One X	Sold at 7/6d. each.	TRADE PRICE 33 1/2%
" Two XX	" 10/6d. "	
" Three XXX	" 15/- "	
" Four XXXX	" 18/6d. "	

The three and four XXXX grade is made in Ebony or Rosewood, chastely fashioned in both oval and circular bodies.

HINDES "VERY" BRUSH FOR THE HAIR is guaranteed pure bristles, the multiple tufts being set in a rubber air-cushion. They have been known to the trade for nearly 40 years.  
HINDES LTD., 60 PARKER STREET, LONDON, W.C.2. :: Works: BIRMINGHAM.



# NOW FOR CHRISTMAS

*and the Profit Gibbs Gifts will bring you*



## Draw that extra Gift Trade with Gibbs arresting Display Set

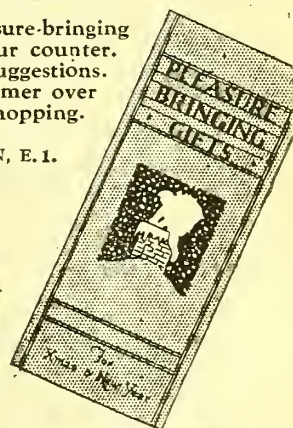
The gift season is here, and with it an unusual opportunity for profitable business. Gibbs Toilet Preparations form an especially attractive range of Christmas Presents. They suit every pocket and cover every imaginable variation in taste and utility.

Gibbs Xmas Gift Display Set comprises three large display cards, beautifully printed in many colours; together with one of a pair of large Window Posters. The centre piece stands over 25 inches high and is 12 inches wide; and the flanking cards are 12½ inches by 8 inches. The Window Poster is 24 inches long by 8 inches high.

This Display Set breathes all the gay joyousness of the Yuletide Season. In your window these pieces are at once an invitation to buy and an inspiration to choose the right gift. Ask for a set when you send in your order.

Ask also for Gibbs "Pleasure-bringing Gifts" leaflets, for use on your counter. These give a timely list of suggestions. They will help many a customer over a difficult part of his or her shopping.

D. & W. GIBBS LTD., LONDON, E. 1.



# Gibbs Toilet Preparations



# a new Swedish blade

with a  
powerful  
selling  
appeal



# Matador

gives 3 shaves more

Distributors:

THOS. CHRISTY & CO.

4-12 Old Swan Lane, E.C.4.

MATADOR is a safety blade made of Swedish tempered ribbon steel—the finest in the world for safety blades. It is sharper. It lasts longer.

An extensive advertising campaign for Matador Blades has commenced. Advertisements are appearing regularly in STRAND MAGAZINE, WIDE WORLD MAGAZINE, HUMORIST, JOHN BULL, PASSING SHOW, TIT-BITS, PUNCH, etc.

A wide and steadily increasing sale is assured. Send your order now.

Each advertisement features the unique selling point—

## DON'T MISS LARGE PROFITS

## CHEMISTS & DRUGGISTS

### DISPLAY AND SELL

"AMO"  
SHEFFIELD  
STEEL



## RAZOR BLADES

### NATIONALLY ADVERTISED IN

Daily News—Daily Express—Star—John Bull—  
Evening News.

### RETAILING AT 1/6 FOR TWELVE

ORDER NOW 8/- GROSS. Post Extra (4d. Gross)

OR WRITE FOR FREE SAMPLE AND ILLUSTRATED CATALOGUE

To the Distributors:—L. FRANKENBERG,  
125 HOUNDSDITCH, LONDON, E.C.3.  
Phone—Avenue. 8846 'Grams—Uzernanos, Ald, London.

## SALES INCREASING—

Are you getting your share of the increased sales we are creating by our National Advertising Campaign? Put the "Allegro" in your window, show that you are stocking it, and make good profits.

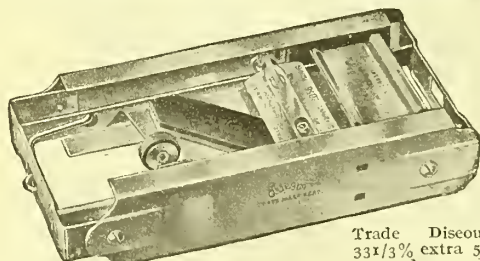


# "Allegro"

THE  
AUTOMATIC HONING & STROPPING MACHINE

State when ordering  
if for Gillette type  
of blade

or Auto-strop or  
Durham Duplex or  
Wade & Butcher.



Retails at 15/6d.

The "ALLEGRO" combines in one machine the STONE for HONING and the LEATHER for STROPPING—All edges automatically put in contact with the sharpening bodies, are sharpened at the correct cutting angle—The most efficient machine—What a man really wants for a smooth shave, and yet—using the same blade indefinitely.

ALLEGRO MACHINE CO., 23a Old Bond St., London, W.1.

Trade Discount  
33 1/3% extra 5%  
on one dozen order

1866-1930

Sixty-four years  
of success—

The

## CHRISTIAN HERALD

is read by more than

## A MILLION READERS

A few of the many well-known  
products regularly advertised  
in the  
"CHRISTIAN HERALD"—

BIRD'S CUSTARD  
BOVRIL  
BORWICK'S BAKING POWDER  
CADBURY'S CHOCOLATES  
CRANE'S PIANOS  
FRY'S COCOA  
HOVIS BREAD  
HODGSON'S CARPETS  
INGERSOLL WATCHES  
McDOUGALL'S FLOUR  
JOHN NOBLE, LTD.  
OXO  
PERSIL and other Soaps  
PHOSFERINE  
QUAKER OATS  
SAMUEL'S JEWELLERY  
WOLSEY UNDERWEAR

&c. &c.

THE "CHRISTIAN HERALD" is read every week in more than 250,000 homes, representing more or less a million readers, and for years many well-known Advertisers have proved from "keyed" announcements its value as an Advertising Medium. Thus it pays to advertise in the "CHRISTIAN HERALD."

Specimen Copy and Rate  
Card on application to  
Advertising Manager

## CHRISTIAN HERALD

6 Tudor Street - - - London, E.C.4



# Reduced prices for, SHERLEY'S WORM MEDICINES

**The Standard Worm Remedy for Dogs & Cats of all ages!**



SHERLEY'S Worm Medicines, which are manufactured by qualified chemists to prescriptions of a leading canine surgeon (M.R.C.V.S.) have a much larger sale than all other similar products. They are now available at the following reduced prices. Quantities of two dozen 6d. or 1/3 packets will be supplied at 4/3 and 10/9 per dozen respectively. These prices will also be charged for any quantities of worm medicines included in £2 parcels. £2 parcels are also subject to special discounts of 2½% and 5%.

Attractive display cards are now available to hold 2 dozen 6d. packets, viz. :-

- 8 Worm Capsules for Puppies and Toy Dogs.
- 8 Worm Capsules for Dogs.
- 8 Worm Powders.

Also Cartons containing 2 dozen 1/3 packets as under :-

- 6 Worm Capsules for Puppies and Toy Dogs.
- 6 Worm Capsules for Dogs.
- 6 Worm Powders.
- 6 Worm Capsules for Large Dogs.

These quantities cannot be varied in any way owing to difficulties in packing.

## REPLENISH YOUR STOCKS OF SHERLEY'S WORM MEDICINES, NOW!

A. F. SHERLEY & CO. LTD., 18 Marshalsea Rd., London, S.E.1.

C.F.H. 75

### MANCHESTER TUTORIAL COLLEGE

327 OXFORD ROAD, MANCHESTER.

J. E. GRIME, B.A., B.D., Director of Studies.

REVISION COURSES, for PRELIMINARY SCIENTIFIC EXAM., start JANUARY, APRIL, JULY and OCTOBER.  
FULL COURSES for PHARMACEUTICAL PRELIM.

**"DEPENDABLE  
TOBACCO  
WHOLESALEERS."**

MIXED PARCELS A SPECIALITY  
Established Fifty Years.

Price Lists mailed on request.

A PROFITABLE SIDE LINE  
FOR CHEMISTS.

SINGLETON & COLE, LTD., CANNON ST., BIRMINGHAM



## BALLOONS

FIRST QUALITY SEAMLESS  
RUBBER BALLOONS

Printed with your  
Advertisement

20ins. 24ins. 28ins. 32ins.  
7/6 11/- 13/- 16/6 per gross

Send for Full List No. 774 POST FREE.

J. C. KING, Ltd.

42-60 GOSWELL ROAD, LONDON, E.C.1

**"The half of knowledge is knowing where to look things up."**

### KNOWN GILLETTE

THE WORLD OVER

1-9 boxes .. .. 27/9 per box  
10 " or more .. 27/3 "  
20 " " .. 27/- "

ILLUSTRATED LIST OF RAZORS ON  
APPLICATION.

**COTY :**  
POWDER .. .. 13/8  
COMPACT .. .. 15/7  
LIPSTICK, 3/- .. .. 23/5  
Do. 3/3 .. .. 25/4

**DURHAM DUPLEX** 1/6 per packet  
CLEMAK .. .. 1/8 "  
7 O'CLOCK .. .. 16/8 per box  
MYATT .. .. 9/3 "  
WANIE .. .. 19/- "  
SOUPLEX (English) .. 8/6 "  
SPIKUSON .. .. 9/3 "  
NIESO .. .. 8/- "  
AMO .. .. 22/3  
ECLIPSE .. .. 22/3

**VALET BLADES** .. .. 36/- box.  
3 Box Lots 72 Packets .. 34/3 "  
2/6 Valet 99 Razors .. 22/- "  
" 3 doz. lots .. 20/6 "  
7/6 " 55 Razors .. 5/- each  
21/- " 1 or 50 .. 14/- "  
2/6 " Strops, 20 - doz. 1/- Strops, 3/-

**GIANT TOPAS SHAVING STICK,**  
6/6 dozen. Highly recommended.

**EVER-READY BLADES** in 5's,  
26.6 box.

SPECIAL OFFER OF EVER-READY  
SHAVING BRUSHES, 20 - doz., each  
BRUSH STAMPED and Guaranteed  
by the EVER-READY CO.

**ALCO CLIPPERS, 0000** .. 26/- doz.  
"BOB" " 0000 .. 24/- "  
"BOB" " 000 .. 20/- "

**DARWIN BLADES, TO FIT  
GILLETTE, AUTO-STROP, EVER-  
READY RAZORS, 29/3 box.**

ALFRED FRANKS & CO., 11 BARTLETT'S BUILDINGS, HOLBORN CIRCUS, E.C.4.





TINS OF  
5 gallons  
1 gallon  
½ gallon

# BARRAL'S

## FINEST FRENCH OLIVE OIL

IS AN  
EXCELLENT SELLER

*The package appeals to the public.*

### THE OIL—

EXTRA CHOICE PROVENCE SUPERIOR IS  
THE FINEST EXPORTED FROM FRANCE.

*Write us for a free two-ounce facsimile  
original container, prices, and terms.*

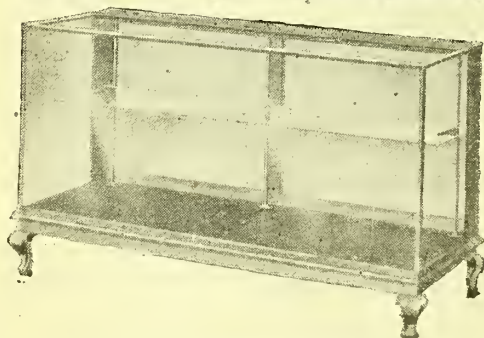
SOLE IMPORTERS OF  
BARRAL & FILS, SALON DE PROVENCE,  
FRANCE.

**CHAS. ZIMMERMANN & CO. (CHEMICALS), LTD.**  
9/10 St. Mary-at-Hill, London, E.C.3



BOTTLES  
Quarts  
Pints  
Half-pints  
Quarter-pints  
2-ounces

## King's for Showcases



No. D.S.T. Solid oak or mahogany frame glass counter. First quality drawn plate glass front, top and sides, with two clear glass sliding doors at back. Interior fitted with standard bars and brackets and one row of plate glass shelves, polished all round. Size over all: 6 feet long x 3 feet high x 2 feet back to front.

### £11 10 0

Ex works. Insured free in transit.  
This showcase can be supplied on a first payment of

### £1 0 2

and 11 further monthly payments of £1 0 2.

Send at once for full list No. 1013 post free.

**J. C. KING, LTD.,**  
42-60 GOSWELL ROAD, LONDON, E.C.1

'Phone: Clerkenwell 2317 (5 lines).

WE SPECIALIZE IN  
HAND COLOURING PHOTOGRAPHS  
AT STANDARD PRICES  
SEND FOR A SAMPLE

**The Swiftsure Photographic Works**  
SUTTON COLDFIELD *Central for everywhere.*

RELIABLE GERMAN FIRM (Bavaria)

wishes to get into touch with buyers of HERBS. Is at present in  
a position to deliver

5,000 Kilos. **Flores arnica c.cal.**

f.o.r. Hamburg, and requests enquiries. Samples submitted with pleasure

Letters to M.B. 4484, c/o RUDOLF MOSSE, Munich, Germany

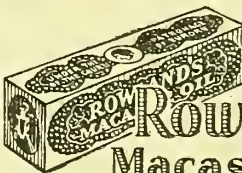
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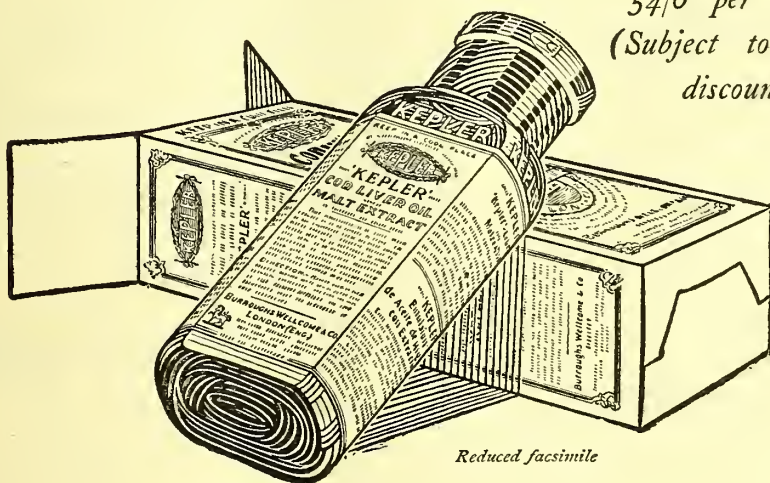
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## Business Changes

MR. A. GROSVENOR, chemist and druggist, has acquired the business of Mr. J. Hughes, Rubery, Birmingham.

MR. G. E. BUTLER, chemist and druggist, has opened a pharmacy at Wickham Road, Park Langley, Beckenham.

MR. S. W. DAWSON, chemist and druggist, has acquired the business of Mr. J. A. Turner, chemist and druggist, 6 Potters Road, New Barnet.

C. F. MARSHALL & SON, tooth-brush and shaving brush manufacturers, have removed to Connor Works, Connor Street, South Hackney, London, E.9.

MR. G. P. WORTH, chemist and druggist, has purchased the business of Mr. F. W. Vinden, chemist and druggist, 69 Magdalen Road, Exeter.

THE MILLER RUBBER COMPANY, Akron, U.S.A., are now represented in this country by Mr. Lewis Knight, 18 Dufferin Street, Bunhill Row, London, E.C.1.

## English and Welsh News

The Editor will be obliged if subscribers will send him marked copies of newspapers containing items of interest for insertion in this or other news sections.

### Merchandise Marks Act, 1926

The Board of Trade have referred to the Standing Committee an application for an Order in Council to require the marking with an indication of origin of imported photographic plates, films and paper. The Committee will consider whether these articles should be marked on sale or exposure for sale, and they may, at their discretion, also consider whether the articles should be marked on importation. The date of the Committee's public inquiry will be announced later and communications should be addressed to the Secretary, Mr. E. W. Reardon, New Public Offices, Great George Street, London, S.W.1, as early as possible, and, in any case, not later than December 13.

### Petroleum (Carbide of Calcium) Order, 1929

An Order in Council, dated November 5, has been published regulating the keeping of calcium carbide and revoking previous Orders on the subject. The principal provisions are (1) that 5 lb. of carbide may be kept without a licence, so long as it is in hermetically closed metal vessels, each containing not more than 1 lb.; (2) that 28 lb. of carbide may be kept with due precautions as to ventilation and other specified matters, provided that notice is given to a local authority.

### Petroleum (Mixtures) Order, 1929

An Order in Council, dated November 5, has been issued defining mixtures of petroleum as "all mixtures (whether liquid, viscous or solid) of petroleum with any other substance except mixtures which, when tested in the manner set forth . . . do not give off an inflammable vapour at a temperature below 73° F." Mixtures not sufficiently fluid to be measured by liquid measure may be kept in 1-lb. hermetically sealed containers up to a maximum of 30 lb. The wording of the labels is given in the Order, and previous Petroleum (Mixtures) Orders are revoked.

### Contracts

The following tenders have been accepted by the bodies named:—

Faversham Guardians.—Mr. J. T. Rolfe, chemist and druggist, drugs, etc.

St. Albans Guardians.—Ekins & Fisher, chemists, surgidressings, etc.

Solihull Guardians.—Mr. J. L. Hall, chemist and druggist, drugs, etc.; J. Bury & Co., dressings.

### Birmingham

An article on "Should Doctors Dispense?" which appeared recently in "The Birmingham Mail," has brought an emphatic negative from a pharmaceutical correspondent, who recalls, in the issue of the paper for November 9, an incident to support his contention.

Mr. Harold Howes, Ph.C., of Selly Park, spoke at the recent second annual meeting of the Birmingham Retailers' Association. Mr. Howes, who is a member of the committee of Chemists' Mutual Wholesale, Ltd., emphasised the danger of the private trader being gradually eliminated.

### Liverpool

Mr. J. Hearle, a well-known North London chemist, was a visitor to Liverpool a few days ago.

Mr. W. H. Clubb, Ph.C., is making satisfactory progress towards recovery from his recent illness.

The interests of chemists and druggists in Wallasey are represented by Councillors Thomas and Wilson, both of whom are in the drug trade.

At Liverpool Police Court, on November 12, Mary I. Appleton was sent to prison for three months for being in unlawful possession of 22 lb. of raw opium. It was stated that the opium was probably intended for exportation to South America, where it would realise a large sum.



### Manchester

The ex-Service members of the staff of James Woolley, Sons & Co., Ltd., held their tenth annual hot-pot supper and smoker at the Grosvenor Hotel, Manchester, on November 8. The directors of the company were present, and all had a very pleasant evening.

A dance organised by the Junior Section of the Pharmaceutical Society's local Branch took place in the Women's Union, Oxford Road, on November 6. There was the best attendance this season, over eighty members and friends being present. After an interval during which refreshments were served, the presentation of the Cupal lawn tennis challenge cup and the president's prize took place. Mr. R. Maskell announced that unfortunately Mr. Franklin, their president, was unable to be present that evening, being in London on important work, and Mr. and Mrs. Woolley (Cupal, Ltd.) were unable to attend, but Mr. John Cleworth would present the prizes. The winners of the Cupal cup (presented by Cupal, Ltd.) were Miss Duncan and Mr. E. Byron, and of the president's prizes (given by Mr. Franklin) Miss Mitchell and Mr. Barker, with Miss Duncan and Mr. Byron as runners-up. The next of these evenings will be a carnival dance on December 4 in the Women's Union.

### Salford

Mr. E. H. Simmons (secretary of the Salford Pharmaceutical Committee), who has been reappointed by the Ministry of Health to serve on the Salford Insurance Committee, was elected vice-chairman at the first meeting of the new Committee.

Mr. W. F. Cuttiford (chairman of the Salford Pharmaceutical Committee) has been returned by a large majority to the City Council, and has again been appointed by the council as one of its representatives upon the Salford Insurance Committee.

### Sheffield

A meeting of the Students' Association was held on November 8 at the Central College. Mr. L. Piper occupied the chair, and a lecture on the British Pharmacopoeia was given by Mr. J. Simon, Ph.C., Leeds.

Mr. E. A. Kirman, secretary of the Sheffield and District Branch of the Pharmaceutical Society, has issued an appeal to chemists in regard to the purses to be presented to Princess Mary on behalf of a religious institution.

### Miscellaneous

**POISON-LICENCES GRANTED.**—Kesteven County Council has granted licences for the sale of agricultural and horticultural poisons to W. & J. Brown, Mr. C. Hill, and Robinson & Green, Stamford.

**FIRE.**—Owing to spirit coming into contact with a flame there was an outbreak of fire on November 8 at the premises of W. J. Bush & Co., Ltd., manufacturing chemists, Hackney, London, E. The damage was confined to the top floor and was not of a serious nature.

**BRITISH TRADE DELEGATION TO RUSSIA.**—The report of the Anglo-Russian Committee on the British Trade Delegation which visited Russia in March and April last has been issued, and may be obtained (price 2s. 6d.) from the secretary at the temporary offices, 4 Lloyd's Avenue, London, E.C.3. The report gives particulars of the factories visited and the economic conditions observed.

**THE ROYAL INSTITUTION.**—The forthcoming series of six Christmas lectures will be delivered by Mr. S. R. K. Glanville, of the British Museum, on "How Things were Done in Ancient Egypt." The lecture-theatre of the Institution of Electrical Engineers, Savoy Place, W.C.2, has been lent for these lectures, which are to be given on December 28 and the following Tuesdays, Thursdays and Saturday.

**IN THE COURTS.**—At Tower Bridge Police Court, London, on November 8, Charles Kelly (40), warehouseman, was charged with stealing disinfectant, 100 laxative tablets, iodine and other goods worth together 7s., the property of Wright, Layman & Umney, Ltd., Southwark Street, S.E., by whom he had been employed. The accused, who pleaded "Guilty" and said he was sorry, was placed on probation for twelve months.

## Irish News

### Brevities

The co. Limerick Board of Health has decided to request that in future contracts for the supply of medicines a condition of the contracts be that they be delivered to, and empties removed from, the different dispensaries at the expense of the contractors.

At Eglinton Petty Sessions, co. Donegal, recently, Mary Torrens was fined 10s., with 12s. 6d. costs, for having sold cream of tartar which was certified by the public analyst to contain 7.9 per cent. of acid potassium sulphate and only 8.3 per cent. of acid potassium tartrate.

## Scottish News

### Brevities

Mr. James Lohoar, chemist and druggist, has been elected a member of the committee of the Hamilton Merchants' Association.

The Cooper Laboratory, Ltd., manufacturing chemists, Watford, announce that they have appointed Samuel S. Goldberg & Co., Ltd., 153 Oxford Street, Glasgow, C.5, as their representatives in Scotland.

A new chemists' literary monthly magazine, "The Pillbox," will commence publication in December under the editorship of Mr. Andrew Johnston, chemist, 10 Bloomgate, Lanark. Contributions of pharmaceutical interest will be welcomed by the editor. The subscription rate is 5s. per annum.

Mr. R. A. Robertson, M.A., D.Sc. (St. A.) was formally installed on November 7 as Professor of the new chair of Botany which has been established in the University of St. Andrews. The ceremony took place in the old Parliament Hall of the University Library. Professor Robertson has been teaching botany in St. Andrews University for thirty-eight years, and was appointed lecturer in 1891.

### Glasgow

At a meeting of the Scottish Rexall Chemists' Club, held in Glasgow, Mr. Thomas Harley, Perth, having relinquished retail pharmacy, was elected an honorary member. Mr. Harley has been associated with the Rexall Club since its inception, and for a time acted as treasurer, and latterly was president of the Club, and is the first honorary member elected.

Mr. William Marshall, secretary of the Scottish Association of Insurance Committees, addressing the Glasgow Rotarians on "Medical Treatment of the Worker" on November 6, said: "While I have a very high opinion of doctors, I cannot think that they are entitled to be given a cheque-book on the public purse without some means of control being exercised." Mr. Marshall added that one penny extra on every prescription would cost Glasgow £2,000, and stated that the sum paid by insurance and friendly societies to chemists in Scotland was more than £150,000.

A very successful event took place on October 29 in the Highlanders' Institute, in aid of the building fund of the Glasgow Pharmacy Club. The Ladies' Golf Section were entirely responsible for the function, which took the form of a Hallowe'en party. The spirit of Hallowe'en pervaded. Mr. Abbott, president of the Club, presided, and during the evening Mr. May presented Miss Cairnie (secretary of the Ladies' Golf Section) with a silver spoon, which he had gifted for the lowest aggregate score during the season. Miss Cairnie, in returning thanks, solicited an increased turn out of members for next year's fixtures. Mrs. Macsween and Mr. Abbott adjudicated the costumes, and the prizes for the most original costumes went to Miss Bain and Mr. P. O'Neill. Several members of the Club rendered songs during the evening, and Mr. Abbott at the close thanked all those who had contributed towards the evening's entertainment. Some 100 members were present, and the proceedings ended with the singing of "Auld Lang Syne."



## Wellcome Historical Medical Museum

A RECEPTION was held at the Wellcome Historical Medical Museum, London, W.1, on November 11, to meet the president, committee and members of the Egypt Exploration Society. In the absence of Dr. Henry S. Wellcome, the founder and director of the museum, Dr. C. M. Wenyon, C.M.G., F.R.S., director-in-chief of the Wellcome Bureau of Scientific Research, received the guests. Mr. Warren R. Dawson, F.R.S.E., read an interesting paper on "Egyptian Medicine," a subject on which, as readers of THE CHEMIST AND DRUGGIST are aware, he has written extensively. Our knowledge of this subject, Mr. Dawson remarked, is derived from a series of papyri, the oldest of which dates from the Middle Kingdom, although all of them are clearly derived from much more ancient prototypes. These papyri are for the most part miscellaneous collections of prescriptions and incantations for the cure of diseases of many kinds, and they contain but little information to enlighten us on Egyptian conceptions of anatomy and physiology. The ancient practice of mummification had an enormous influence on the growth of anatomical knowledge. The Egyptians were thus able to distinguish and name a great many organs of the body that a more primitive people would have grouped together or failed to perceive. They shared with many other primitive peoples the belief that death and disease are unnatural and abnormal. Many of the diseases are expressly stated to be "the assaults of a god, the assaults of a goddess, of a dead man or a dead woman, of an enemy, male or female," etc. The titles of the prescriptions clearly embody the same idea, for we find, instead of the simple phrase "prescription for curing" such and such a disease, the words "prescription for banishing," "driving out," "expelling" or "terrifying" the disease. There cannot be the slightest doubt that Egyptian medicine had its origin in magic, and that magic never lost its hold upon medicine, even when the latter was becoming more and more rational. The earliest doctors were magicians, and the earliest forms of treatment were magical rites. The practice of giving the patient a prescription was not so much in order to relieve the sufferer as to expel the demon of disease. Through a long process of more or less ineffectual experimenting the Egyptians groped their way towards a rational pharmacopoeia. Wounds were treated by rational means, and with their treatment surgery came into being. It must not be forgotten that through the thirty centuries or so that preceded the birth of scientific thought in Greece, Egypt had painfully laid the foundations upon which later investigators were to build. A careful study of the Egyptian texts reveals a modicum of correctly observed truth—the very foundations of medical science.

Among those who accepted invitations to the reception were:—Dr. and Mrs. Andrew Balfour, Miss Balfour, Mr. and Mrs. H. Idris Bell, Mr. and Mrs. Eumorphopoulos, Lady Evans, Dr. and Mrs. Henry, Miss Ionides, Sir Frederic and Lady Kenyon, Sir Henry and Lady Lyons, Lord and Lady Melchett, Sir Henry Miers, Dr. and Mrs. Robert Mond, Sir Frank and Lady Newnes, Sir Denison and Lady Ross, and Lady Tirard.

## Retail Pharmacists' Union

**Ipswich.**—The annual business meeting of the Ipswich Branch was held on November 4. There was a good attendance of members. The following were elected officers:—*President*, Mr. S. J. Stearn; *Secretary and Treasurer*, Mr. E. H. G. Bennett; *Committee*, Messrs. Hales, Coutts and Welch. With regard to the National Formulary for N.H.I. purposes, it was suggested that the R.P.U. should print large-type postcards for 8-oz. mixtures, one prescription on each card. Arrangements for Christmas closing were deferred. The action of the R.P.U. against price cutting was commended.

## International Pharmaceutical Federation

THE Board of the International Pharmaceutical Federation met at Berlin on October 30 and the following day. On the evening preceding the meeting the members were entertained at a supper given by the Deutsche Apothekerverein. Among those present were Dr. Salzmann (president of the Verein), Dr. Wartenberg, Dr. Hans Meyer (editor of the "Apotheker Zeitung"), Professor Dr. van Itallie, M. Barthet, Professor Dr. Thoms, Dr. Schamelhout, M. Poignant, Dr. Hofman, Dr. Rising and Professor Baggesgaard Samussen.

The proceedings on October 30 were opened by Professor van Itallie, who made a brief reference to the late Mr. Edmund White, a former member of the Board, and to M. Haazen, who had resigned his membership. In connection with the work of the Paris meeting of last year, a committee is collecting formulas which can be used for the purpose of an international formulary. The report of the committee on international nomenclature was discussed, but no resolution was passed. The matter will be brought up at the next meeting of the Federation, to be held at Stockholm on July 16, 17, 18, 1930. A committee, of which Mr. H. N. Linstead is secretary, was invited to prepare data concerning the dispensing of medicine in ships.

The question of the control of proprietary medicines by national laboratories and the international co-operation of such laboratories was discussed as the outcome of a report by Dr. Rising, in which it was suggested that the control of proprietary articles must be carried out co-operatively by pharmaceutical associations in the various countries. A committee was appointed to examine the Swedish methods of analysis, to compare them with other methods, and to make proposals at the Stockholm meeting. The provisional arrangements for this meeting include dinners on July 17 and 18, and a trip on July 19. Certain changes in the rules will be proposed by the Board in the course of the proceedings. Visitors should intimate their intention to be present by January next.

## Coming Events

This section is reserved for advance notices of meetings or other events. These should be received by Wednesday of the week before the meetings, etc., occur.

### Monday, November 18

*Royal Society of Arts*, John Street, Adelphi, London, W.C.2. Cantor lecture at 8 p.m. on "Musical and Scientific Aspects of Wind Instruments," by Mr. E. G. Richardson, Ph.D., D.Sc.

### Wednesday, November 20

*Exeter and District Branch of the Pharmaceutical Society*. Annual meeting, Rougemont Hotel, Exeter, at 3.30 p.m. Lantern lecture at 4.45 p.m. by Mr. W. Deacon.

*National Association of Women Pharmacists*. Address by Dr. Winifred Cullis in lecture theatre, 17 Bloomsbury Square, W.C.1, at 8 p.m.

*Manchester, Salford and District Branch of the Pharmaceutical Society*. Annual smoking concert in aid of the Benevolent Fund, Clydesdale Club, Turner Street (off High Street), at 8.15 p.m. Short address by Mr. T. Hardy. Tickets 2s.

*Royal Society of Arts*, John Street, Adelphi, London, W.C.2. Ordinary meeting at 8 p.m. "The Protection of Rural England," by Mr. P. Morley Horder, F.S.A.

### Thursday, November 21

*Swansea, Neath and Port Talbot Branch of the Pharmaceutical Society*. Meeting at 3 p.m., Masonic Hall, St. Helen's Road, Swansea. Cars may be parked in Russell Street. Speaker, Mr. John Keall.

*West Ham and District Association of Pharmacists*. Lecture and demonstration at 3 p.m. by Mr. Basil Bailey on the "Uses of Dennison Crêpe for Window Decorations," at the Red Triangle Club, Greengate Street, Plaistow (one minute from the Greengate, Barking Road, and five minutes from Plaistow Station, District Railway).

### Friday, November 22

*North British Branch, Pharmaceutical Society of Great Britain*, 36 York Place, Edinburgh. First evening meeting of the session at 8 p.m. Chairman, Mr. Charles Simpson. Presentation of Ph.C. Diplomas. Inaugural sessional address, "The Human Side of Chemistry," by Professor James P. Kendall, F.R.S.



## American Notes

**BACK TO PHARMACY.**—At a meeting of the National Association of Retail Druggists in Minneapolis recently several prominent leaders of the craft stressed the necessity of pharmacy going back to its own, coupled with the assertion that the chemist who to-day presents himself as a reliable dispenser of drugs and medicines is finding public favour. That this is appreciated by the profession is indicated by the increasing observance of pharmacy week.

**FELLOWSHIP IN PHARMACEUTICAL RESEARCH.**—A new fellowship in pharmaceutical research has been established at the Philadelphia College of Pharmacy and Science. The fellowship, which carries with it a stipend of \$1,000 and free tuition, not only offers the opportunity for original research under competent direction, but also to pursue studies leading to the degrees of Master of Science (M.S.), Master of Pharmacy (Ph.M.), and Doctor of Pharmacy (Phar. D.).

**APPLICATION FOR INJUNCTION.**—Thomas Kerfoot & Co., Ltd., Bardsley, Lancashire, whose American representatives are E. Fougere & Co., Inc., New York, have filed a suit in the United States District Court of Delaware against the United Drug Company and Louis K. Liggett Co. In their plea for an injunction, counsel for Messrs. Kerfoot states that the United Drug and Liggett companies manufacture and sell an inhalant under the name "Vapure." Selling an inhalant with a name so similar to "Vapex" which has been on the market in this country since 1922, together with other circumstances, constitutes unfair competition; it is contended.

**WINE TONICS RESTRICTED.**—The Prohibition Bureau declared war recently on manufacturers of wine tonics who are putting out products which, according to reports, are being consumed in large quantities as beverages, with a ruling that after October 15 all such tonics must contain not less than 30 per cent. of solids. Similar action was taken lately in connection with the manufacture of malt tonics. Under the ruling, the alcoholic and medicinal content of the wine tonics, which varies in different classes of preparations, will continue to be regulated by rules now in force. But the 30 per cent. of solids, which the government is satisfied will render the preparations practically worthless as beverages, must be added.

**THE UNITED STATES PHARMACOPOEIA.**—On May 13, 1930, the United States Pharmacopœial Convention will meet in Washington to organise the work of revision of this official standard for drugs and medicines. The Convention meets but once in each decade. Although federal laws concerned with the control of the purity of drugs provide for the enforcement of drug standards set forth by the Pharmacopœia, the book is not published by or under the control of the federal government. It is published by authority of the United States Pharmacopœial Convention. The convention's chief function is the selection of the Committee of Revision of the United States Pharmacopœia. To this committee is assigned the task of making any desired changes in the Pharmacopœia then in force and of issuing a revised edition of the book.

**FOREIGN TRADE IN CRUDE DRUGS.**—Exports of crude drugs from the United States, exclusive of ginseng, for the past seven years have exceeded an average of \$1,150,000 per year in value, and for the first six months of 1929 amounted to \$436,000, according to the Chemical Division, Department of Commerce. The average export value of ginseng for the past seven years has been approximately \$2,500,000, while for the first six months of 1929, 136,000 pounds were exported valued at \$1,583,000, an increase of 25,000 pounds and \$513,000. This drug is sold chiefly to China. The United States is a very large consumer of crude drugs in the preparation of its medicines. Nearly \$20,000,000 worth is ground annually, some from indigenous and some from imported drugs. Production figures for 1927, the latest available, record \$9,205,243, against \$8,444,361 for 1925. Imports of crude drugs for the past seven years have approximated an average yearly value of \$8,770,000. The tendency for crude drug imports has been to increase. Imports for the first six months of 1929 were valued at \$4,902,000. The values quoted are exclusive of gums, resins, balsams, and essential oils.

**PHARMACEUTICAL RESEARCH AWARDS.**—The American Pharmaceutical Association has sanctioned the following grants from its research fund:—(1) To H. V. Army, College of Pharmacy of Columbia University, for completion of the \$2,000 fund required to finance the two-year fellowship planned for the study of the deterioration of chemicals and pharmaceuticals under the influence of light, \$200; (2) to E. H. Kraus and F. F. Blicke, of the College of Pharmacy of the University of Michigan, for continuation of research on the phenol halophthaleins, \$200; (3) to E. Kremers and S. Chechik, of the College of Pharmacy of the University of Wisconsin, for research on thymol derivatives, \$250; (4) to W. J. Husa, of the College of Pharmacy of the University of Washington, for continuation of work on the stabilisation of pharmaceuticals, \$100. The \$750 available for research grants this year represents one-half of the annual interest on the A.Ph. A. research fund—a fund accruing out of the profits on the sale of the National Formulary.

## Canadian Notes

**ACETIC ACID AND PHOSPHORUS.**—During 1927 Canada supplied Great Britain with 7,260 tons of acetic acid (valued at £356,132) out of a total import of 13,118 tons (valued at £574,126). Canada also supplied over 90 per cent. of the phosphorus imported into Great Britain, viz., 27,499 cwt. (valued at £95,331).

**SODIUM SULPHATE WORKS DESTROYED.**—The sodium sulphate works at Mossbank, Saskatchewan, about 30 miles south of Moose Jaw, have been destroyed by fire, with a loss said to exceed \$500,000. More than 500 tons of refined sodium sulphate and the machinery were destroyed, together with the power and storage houses. The deposit of Glaubers salt at Mossbank is said to be 14 feet deep, and it is claimed that eight years of work have made little impression on it.

**THE STATUS OF DRUG CLERKS.**—Some months ago application was made by the drug clerks of British Columbia to the Minimum Wages Board for the revision of wages and the improvement of working conditions, but the Board decided that it had no jurisdiction. Failing in this direction the drug clerks throughout British Columbia appealed to the Supreme Court of their province to compel an investigation into the status and working conditions of drug clerks in B.C. On October 28 the Supreme Court handed down the decision in which it ruled that pharmacy is a profession, and that the Male Minimum Wages Act was not intended to apply to the members of a profession.

**ADDITIONS TO PATENT MEDICINE ACT.**—In sending out the usual notices regarding the renewal of licences to sell patent medicines, the Department of Pensions and Health have made further additions to the regulations of the schedule of "The Patent or Proprietary Medicine Act," and special attention is called to the following potent drugs:—Phenobarbital, beta-naphthol, ephedrine salts, phosphorus, scopolamine, butyn and hyoscine. All these have been added by Orders-in-Council, dated August 7 and September 25, 1929. If any of these drugs should be used in the manufacture of proprietary medicines it will be necessary to specify to the Department under affidavit the name and proportion of the drug contained per maximum dose, and as to be directed in twenty-four hours. The name and quantity present per maximum dose must also be printed on the labels and wrappers.

**M. SEXOT**, professor of botany, has been nominated Dean of the Nancy Faculty of Pharmacy, and assistant Professor Damiens succeeds to the chair of inorganic chemistry at the Paris Faculty.

**REGISTRATION OF MEDICINES IN HONDURAS.**—The Faculty of Medicine, Pharmacy, and Surgery of Honduras has announced its intention to enforce the provisions of article 67 of the law of pharmacy, requiring the analysis and approval of prepared medicines and pharmaceutical specialities by the faculty before such products can be sold or distributed in the Republic. The request for registration should be accompanied by the formula and a sample of the preparation.



## Medical Hydrologists Confer

THE annual meeting of the International Society of Medical Hydrology, held this year chiefly in Budapest, but also in Vienna, maintained its customary highly scientific atmosphere in spite of many distractions occasioned by the overwhelming hospitality on the part of the hosts. The foreign guests, coming from twenty-one countries, and speaking almost as many languages, numbered 166, to which must be added several Hungarian *confrères*, so that the company totalled some 200. The Society was officially honoured at a reception at the Royal Palace by the Regent of Hungary, who spoke with a representative delegate from each country, and at the inaugural session in the great hall of the Hungarian Academy of Sciences by speeches of welcome delivered by his Excellency Dr. Joseph Vass on behalf of the Hungarian Royal Government, by the Lord Mayor of Budapest on behalf of the Municipality and by the Dean of the Medical Faculty of Medicine of the University of Budapest. During the closing year the Society was honoured by having Lord Dawson of Penn for its president; his successor in the chair is Dr. A. de Koranyi, Professor in the University of Budapest.

The first medical discussion dealt with "The Action of Hypertonic Waters." Professor Dr. L. V. Dalmady of Budapest opened the proceedings with a consideration of the Hungarian springs, among which many are hypertonic, including the well-known Hungarian Janos water which rises within four or five miles of the city. One of the most remarkable features of the subject was that so many highly mineralised waters break forth within the confines of the city itself and in the immediate neighbourhood. To the visitor the most impressive is what is said to be the hottest spring in Europe, supplying the Szechenyi Thermal Bath on Margaret Island, issuing from the top of a rock and falling normally as a steaming cascade into the Danube. However, on its way to the river it passes through a series of bathing pools maintained at prescribed temperatures and utilised for the relief of human suffering. The temperature of the water in the cascade is 43° C.; but it is known to have a temperature of 73.92° C. at a depth of 970 metres (3,000 feet), the level from which it rises. The supply is abundant. Professor Pinilla of Madrid distinguished the action of hypertonic waters of the chloride type, e.g., La Toja, from that of the sulphated hypertonic waters, e.g., Carabana. By independent investigation Dr. Harpuder of Wiesbaden confirmed the view of others that "In explaining the action of hypertonic mineral waters two factors must be taken into account: (1) The osmotic action; (2) the action of the mineral substances in solution. Both factors come into effect, the first in the alimentary canal and after resorption in the system as a whole." A note on British hypertonic waters by Dr. R. Fortescue Fox, the chairman of the Council of the Society, showed that persons of plethoric congestive habit, especially between the ages of thirty-five and fifty-five, can avoid or gain relief from many of the consequent disorders by resort to hypertonic waters: Harrogate, Leamington and Cheltenham are typical. The second medical discussion was on "The Use of Waters and Baths in Cardiovascular Affections." A decision of the Council to extend the scope of the Society's activities and studies to thalassotherapy (sea-water treatment) will appeal to us in our own island home.

### THE LEAGUE AGAINST RHEUMATISM

A feature of this year's meeting was the incorporation of the first international meeting of the Ligue Internationale contre le Rheumatisme, which was founded a year or so ago by the I.S.M.H. It is not surprising, therefore, that half of the medical discussions were devoted to hydrology and half to rheumatism. This league is under the presidency of Dr. R. Fortescue Fox of London, with Dr. J. van Breeman of Amsterdam as honorary secretary and director of the Advisory Bureau. Its new official Journal, "*Acta Rheumatologica*," is published in Rotterdam. Like the organ of the parent Society, "*The Archives of Medical Hydrology*," it publishes original communications in the language of the author, but as far as possible in either English, or

French, or German, and gives a *résumé* of each paper in two other principal languages. How thorough is the enterprise may be judged from the publication of recent bibliography in the "*Acta*" for October. No fewer than 246 papers and books are catalogued with all needful data for reference, the great majority having appeared during the present year; 127 of them are in English, 105 in German, and thirty-one in French. Large national committees of influential men have been formed in fifteen European countries and in the United States to co-operate in the investigation. Sir Thomas Horder, Bt., is chairman and Dr. M. B. Ray secretary of the British Committee on Rheumatism. Several papers emanating from no fewer than ten European countries were read on two main themes—(1) the relation between acute and chronic rheumatism in the various countries, and (2) the hæmatology and serology of rheumatism.

### STANDARDISING ANALYTICAL DATA

Two matters concern analytical chemists and pharmacists especially. The first is the continuance of the movement by the International Standard Measurements Committee under the chairmanship of Dr. S. Judd Lewis, F.I.C., Ph.C., of London, to regularise the manner of reporting analytical and other data relative to medicinal mineral waters. Among the decisions of last year were:—(a) That the analysis be expressed as "ions" in terms of (i) parts per million, the "I.S.M." term, (ii) also in "national" terms, and (iii) in "millinormality" ( $N/1000$ ); (b) optionally as "salines," but only if calculated according to a prescribed arbitrary formula; (c) specific gravity at  $t^{\circ}/t^{\circ}$ ; etc. This year the decisions include prescription of analytical process in certain cases, and direction that boric acid, silicic acid and titanous acid shall be expressed as such, the view being taken that they do not exist in an ionised condition. An important practical step was taken defining the manner of uniform publication of the information so derived to be followed in all countries, so that approved information regarding the analysis, the classification, and the medicinal, physical and other properties of the water, as well as climatological, geographical and other data regarding the spa may be readily comprehended by practitioners in all countries. The pamphlets being uniform in style, these will bind together loose-leaf fashion or otherwise. Each national "register" will consist of a few pages of international direction and a few pages of official matter of national interest, followed by sections of "Data" describing fully each spring. The "Data" will be published from time to time as they become available.

The second item was a protest made by Dr. Hirsch, of Berlin, complaining that artificial mixtures of salts were marketed by irresponsible persons and sold as "Carlsbad Salts," "Kissingen Salts," etc. Such representations were false, and he appealed to the Society to take some steps to restrict the practice. A Committee was appointed to inquire into the matter, the representative for Great Britain being Dr. S. Judd Lewis.

Visits were made to several bathing establishments and sanatoria in and around Budapest. The headquarters of the Conference were at the St. Gellert Thermal Bath. Visits to the St. Luke's Thermal Bath, with its large mud pond, into which issues the "Bubbling Spring" at a temperature of 62°C., and the St. Margaret's Island establishments occupied an afternoon. In one of these were four large pools maintained respectively at the temperatures 25°, 30°, 35°, and 40° C. for treatment of obesity and other complaints amenable to such treatment. A large and beautiful sanatorium has recently been established at Svabhegy, on an eminence 526 metres high, commanding a magnificent view of the country around, with Budapest in the distance. Dinner by invitation of the Royal Hungarian Government, lunch by invitation of his Royal Highness Archduke Francis Joseph, and dinner given by the Lord Mayor, as well as light refreshments at sanatoria or other institutions regaled the guests every day. Next year, the annual meeting of the League against Rheumatism will be held in Liège, and that of the International Society of Medical Hydrology in Portugal.



## Legal Reports

**Lime Water.**—At Ashton-under-Lyne Police Court, recently, Mr. Albert Gray, chemist and druggist, Wellington Road, was summoned for having sold lime water which contained 0.08 per cent. of calcium hydrate instead of 0.54 per cent. "as required by the British Pharmacopoeia." Mr. Hall, for the defendant, objected to the form of the analyst's certificate, contending that the British Pharmacopoeia only mentioned calcium oxide and not calcium hydrate. The magistrates overruled the objection. Mr. B. F. Robinson, for the prosecution, said that the borough analyst agreed that if lime water was kept the action of the carbonic acid in the air reduced the calcium hydrate to calcium carbonate, but that did not account for the deficiency of the calcium hydrate to such an extent. Mr. Hall submitted that not only did lime water deteriorate to an extraordinary degree, but that in hot weather there was less solubility. The magistrates agreed to the case being withdrawn on payment of the costs.—The same course was taken in the case of Harry Harrop, herbalist, Stamford Street, summoned for a similar offence.

## New Companies and Company News

**P.C. means Private Company and R.O. Registered Office.**

**WOOLSTON'S PHARMACIES, LTD. (P.C.).**—Capital £500. Objects: To acquire the business heretofore carried on by Sarah E. Woolston at 87 Pontefract Lane, Leeds, and to carry on the business of chemists and druggists, etc. The permanent directors are: Sarah E. Woolston and S. W. Woolston.

**IRIS (SURREY), LTD. (P.C.).**—Capital £500. Objects: To carry on the business of manufacturers of and dealers in soaps and toilet preparation, toilet requisites, perfumery, skin, hair and face creams, etc. The permanent directors are: M. D. Field and Mrs. Elsie Field. R.O.: "Quickly," Fetcham, Leatherhead.

**PYNE, ROBERTS, LTD. (P.C.).**—Capital £1,000. Objects: To acquire the business of manufacturing chemists now carried on by F. H. Ledsham and A. P. Ledsham at Market Place, Brentford, as the "Camfortol Manufacturing Co." The subscribers are: L. Crompton and L. T. Halliday. R.O.: 17 Market Place, Brentford.

**MID-SURREY RUBBER CO., LTD. (P.C.).**—Capital £200 in 100 founders' and 100 ordinary shares of £1 each. Objects: To carry on the business of a factor, agent and manufacturer of surgical, rubber, dental, druggists' and chemists' sundries carried on by W. J. Maysey as "The Mid-Surrey Rubber Co." at 42a, Kew Road, Richmond, Surrey. The directors are: W. J. Maysey and Mrs. Florence M. Maysey. R.O.: 42a Kew Road, Richmond.

**KOLOZONE CHEMICALS PROPRIETARY, LTD. (P.C.).** registered at Pretoria.—Capital £10,000. Objects: To purchase full information for the process of manufacturing certain medicinal preparations, such as lung healer, croup mixture, skin balm and nerve tonic. The first directors are: J. Keyser, H. R. Sharp, C. E. Morley, J. C. Koller, J. J. Wessels and E. Gallewski. The secrets of the formulas will be disclosed only to Koller and Morley and the board of technical advisers to the company, who are to be appointed from Prof. W. J. Walker, Prof. H. Stephen, Dr. R. A. Ross, Dr. D. J. Douth and Mr. D. Millin. An agreement has been entered into between the company and the vendors, Koller & King, whereby Mr. Koller is to receive 25 per cent. of the shares in the company and £250 in cash, and Mr. King 20 per cent. of the shares and £500 in cash. R.O.: 39-40 Beresford House, Main Street, Johannesburg.

**BRITISH CYANIDES CO., LTD.**—The net profit for the year ended June 30, 1929, was £10,025 (against £4,447). Dividend for year on preference shares, together with Rock Investment Company's percentage, £1,582 (against £1,650), forward £10,292 (against £1,850). The directors are satisfied that the company has made substantial progress during the year.

**PHILIP JOSEPHS & SONS, LTD.,** shopfitters, 90 to 92 St. John Street, Clerkenwell, London, E.C.1, inform us that they have not, and never have had, any connection whatsoever with the firm of Percy R. E. Josephs.

**COMPANIES WHICH MAY BE DISSOLVED.**—The following are among the companies which will, unless cause to the contrary is shown, be struck off the Register at the expiration of three months from November 12:—Little's Oriental Balm, Ltd.; Puncture, Ltd.; Reveille Health Salts Co., Ltd.

**BURT, BOULTON & HAYWOOD, LTD.**—The net profit for year ended June 30, 1929, amounts to £70,326, to which is added £8,389 brought forward, making £78,714. A sum of £37,142 has been appropriated for payment of preference dividend, interim dividend and distribution of workers' certificates, leaving £41,572. The directors recommend a final dividend of 5 per cent., less tax, on ordinary shares, making, with interim dividend of 5 per cent. already paid, a total of 10 per cent., less tax, for year, and a final distribution on workers' certificates of £640, carrying forward £14,956.

## Voluntary Liquidation

**A. Dickie, Ltd.,** 28a Station Road, Portslade, chemists and druggists. The statutory meeting of the creditors was held on November 6 at the offices of the Association of Manufacturing Chemists, Kimberley House, Holborn Viaduct, E.C. Mr. Parkin S. Booth, the accountant to the Association, submitted a statement of affairs which showed ranking liabilities of £692 4s. 4d., made up as follows: Trade creditors £411 9s. 4d., cash claim £5 15s., and partly secured creditor £275. The latter was the bank, who held the lease of the premises which for the purposes of the statement was valued at £425. Their total claim was £700, and they also held collateral security to the extent of £300. The cash creditor was Mr. Curtis, a director, who was also the qualified man in the company. The assets comprised cash in hand £1 6s. 6d.; stock at cost £100, valued at £75; fixtures, fittings and utensils £694 14s. 10d., valued at £50; and book debts £25; making a total of £151 6s. 6d. After allowing £47 5s. for preferential claims, the net assets were £104 1s. 6d., or a deficiency of £588 2s. 10d. Mr. Booth reported that the business was originally carried on as a drug store by Mr. A. Dickie at the above address. The company was formed on September 25, 1925, with a nominal capital of £1,000. The company took over the business, and issued fully paid shares of the face value of £990 to Mr. Dickie in satisfaction of the assets transferred. Balance sheets had been regularly prepared, and it appeared that during the year to September, 1926, the sales were £2,005, with a net loss of £37. In the following year there was a net loss of £115 on sales of £2,048, and in the succeeding 12 months, there was a net loss of £337 on a turnover of £2,109. It was estimated that since September, 1928, the sales had declined to £1,331, and there had been a substantial loss. For some little time past, efforts had been made to dispose of the business, and negotiations to that end were in progress. Recently the company had been pressed, and a number of creditors had commenced proceedings. A resolution was passed confirming the voluntary liquidation of the company, with Mr. Booth as liquidator, and the representatives of the three principal creditors were appointed to act as a committee of inspection. The following are creditors:—Burgoyne, Burbidges & Co., Ltd., £22; Bush, W. J., & Co., Ltd., £17; Cox, A. H., and Co., Ltd., £16; Houghton-Butcher (Great Britain), Ltd., £11; Maw, S., Son & Sons, Ltd., £16; Redgrave, Butler & Co., Ltd., £30; Sutton, W., & Co., £61; Taylor Developing & Printing Works, Ltd., £64; Wright, Layman & Umney, Ltd., £11; Yardley & Co., Ltd., £16.

## Gazette

### Bankruptcy Acts

#### RECEIVING ORDER AND ADJUDICATION

**BISHOP, J. D.,** 22-23 Great Tower Street, London, E.C., and "Conzut." Weybridge, Surrey, scientific glass and bottle merchant.



## Overcrowding in the Professions

By F. G. Hobart, F.R.C.

THE problem of overcrowding in pharmacy is one which is naturally attracting a good deal of attention at the present time. The record number of entries for the Qualifying examination which this year has witnessed has been the means of creating not a little inquietude concerning the prospects which pharmacy can hold out to its young men—and women. Undoubtedly this sudden access to the ranks of qualified pharmacists will tend to make conditions rather more difficult in the immediate future; but, on the other hand, it must be recognised that the present rush is largely attributable to the fact that all students who can manage to work in the minimum period of training are seeking to become qualified under the old system before the rigors, real or fancied, of the written examination are enforced. It may, therefore, be fairly safely assumed that the present figures will remain exceptional; when the rush has subsided the future entries for some time to come will probably be below the normal rather than otherwise.

In a recent publication on pharmacy as a career, issued by the Ministry of Labour in conjunction with the Incorporated Associations of Head Masters and Head Mistresses of Public Secondary Schools, which received some notice in the columns of THE CHEMIST AND DRUGGIST a few weeks ago, a statement is made to the effect that overcrowding, as far as pharmacy is concerned, has not yet perceptibly reached saturation point. This is rather open to the objection that, failing precise definition (a question of no small difficulty), what constitutes saturation must be a matter of individual opinion. Most pharmacists, however, who have had recent experience, either as employers or employees, of the competition for vacant posts, will agree that, even at the present time, overcrowding has reached the acutely uncomfortable stage, and is having its inevitable reaction upon the market standard of pay. Nor is the situation peculiar to this country. In Austria, early this year, as a counter-measure against the increasing amount of unemployment amongst assistant pharmacists, an agreement was reached between the representatives of the proprietors and the assistants, whereby the number of new apprentices to be admitted to registration should be limited to ten each year for the whole of Austria. The arrangement further stipulated that preference should be given to the sons and daughters of chemists; and in completing the quota for any particular year, other applicants were only to be accepted if the master agreed to retain the apprentice's services as assistant for at least two years after completion of the practical training.

The Austrian precedent of restriction of entrants, even if it were possible of application in this country—and without further and highly unlikely legislation it certainly is not possible—might resolve pharmacy's difficulties in the matter, but would leave untouched the wider problem of overcrowding. Indeed, under modern conditions overcrowding in the ranks of its followers is the penalty which every profession must pay because of being a profession; and the problem must become increasingly acute as education becomes more widespread and its general standard higher. In some respects the process of overcrowding has had repercussions which are not undesirable. Thus, one has witnessed during the last twenty years, and particularly since the Great War, a gradual invasion by young "high-school" folk of occupations, for which, previously, human material of the cheapest sort would have been considered good enough. The vast improvement in the *personnel* of the big stores and good-class shops generally is one indication of this trend. Hair-dressing has almost secured the status of a profession. Commercial travellers are different beings. The police force is transformed; and even manual trades, such as bricklaying, engineer-fitting, etc., are becoming more and more academic in the training given to apprentices. Grocers have their own institute and a by no means negligible technical examination.

To the social reformer the process is one of exceptional interest, because it will increasingly involve the levelling up not only of economic standards but of class distinctions. To the education list comes the promise of a true perspective of education—education as an end in itself, or as the means to a fuller life and an escape from the position of the cobbler who, having received technical "education" in the art of making boots, made boots to live and, as far as he could see, only lived to make boots.

## Costly Insurance Prescribing

SOME practitioners believe in many ingredients; they cannot tear themselves away from the fetish of the multiple drug mixture. Others have a particular fancy for one or two special drugs or preparations, and prescribe these on all occasions in combination with various other medicaments. Other doctors, again, lean towards large doses of all the drugs they prescribe, and if these drugs are tinctures or preparations of morphine, or if they are bismuth, bromide, iodide, or quinine salts, they are costly in most cases. All drugs added unnecessarily to the mixture or used in unnecessarily large quantities tend to increase the cost of treatment, and generally lead to waste. With this one may group other drugs used as flavourings. Generally, the infusions and the aromatic syrups or waters are not prescribed for their therapeutic value, but in order to render the medicine palatable. While one need not deny the poor patient the extra drug which will render his dose agreeable, this matter of flavouring can be greatly overdone. Some prescribers will order three different preparations of this kind in one mixture, such as spt. chlor., glycerin and inf. aurant. The use of spirituous essences in mixtures merely for flavouring purposes is unnecessary, and all redundant prescribing is extravagant prescribing. Medicine which is taken too frequently is wasted. Some practitioners seem to order all their medicines to be taken every two or three hours. Then a sixteen-ounce mixture containing an expensive infusion or an aromatic water as the vehicle with a dose of one ounce must cost more than the same ingredients in an eight-ounce bottle with half the dose.

### NEEDLESS QUANTITIES AND INGREDIENTS

It appears to be unnecessary that these preparations should be regularly ordered in large quantities. Only in exceptional cases, surely, would more than three ounces of liniment or one ounce of paint be required. Yet some prescribers appear to think that eight ounces of liniment is the only quantity which will suit the needs of every patient. The original prescription can always be repeated if necessary, but it is not so easy to recover the cost of the excessive quantities ordered by such doctors, and discarded by the patient because the particular medicament is no longer required. Rectified spirit is another source of extravagance. It is a most expensive preparation, and should not be ordered unless really necessary, and then only in reasonable quantities. Its use in external preparations seems unjustifiable. Proprietary preparations are nearly always expensive, and suitable substitutes can generally be found which are less costly and yet equally efficacious. Some practitioners must have very little knowledge of the preparation they order, for occasionally they endeavour to improve upon the original proprietary by adding other—and often quite unsuitable—drugs to it.

In dressings many doctors err on the side of liberal supplies. Even the patient occasionally points out to the chemist that the quantity of lint or wool ordered is larger than the case appears to warrant. Some practitioners can only think in quarter-pounds. Gauze, again, is a pitfall for many prescribers; unless the quantity is indicated by length the doctor himself rarely knows how much the patient will receive. As for plasters, it is difficult to imagine what a patient is intended to do with one square yard of adhesive plaster. Probably few pharmacists—or manufacturers either—have seen this in one piece, yet orders for this quantity are occasionally met with.—*Observer* (13/3).



## Pharmaceutical Society of Great Britain

### Evening Meeting in London

THE first evening meeting of the present winter session was held in the lecture-theatre, 17 Bloomsbury Square, London, W.C.1, on November 12, the president (Mr. L. Moreton Parry) in the chair. Supporting the president were Mr. A. R. Melhuish (vice-president) and Mr. H. N. Linstead (secretary). There was a good attendance, and among those present were:—Mr. F. Browne, Mr. F. H. Carr, Dr. Catherine Coward, Mr. R. Fouracre, Professor Greenish, Dr. Haas, Miss Dennis Hayes, Mr. J. Keall, Dr. Linnell, Professor Salisbury and Mr. H. Skinner.

The PRESIDENT said that this was his first opportunity of meeting members on such an occasion, and he was very pleased to see the large number present. In introducing Professor E. N. da Costa Andrade, D.Sc., Ph.D., the president remarked that Professor Andrade was Quain Professor of Physics in the University of London and Professor of Physics in the Artillery College, Woolwich. Professor Andrade, he added, was an authority on the atom and had written several valuable books on that subject. Mr. Parry then asked the Professor to deliver a lecture on

#### Modern Views on Matter

##### [ABSTRACT]

The theory that matter consists in the ultimate of discrete grains, or atoms, is no new thing. The poem "De Natura Rerum," of Lucretius, is an orderly treatise on the atomic theory, founded on general arguments, some of which are astonishingly pertinent. The atomic view of chemistry may be said to have been originated by Dalton at the beginning of the past century, and has furnished the guiding principles of that science from that time on. Nevertheless, before the researches of the present generation, the existence of atoms, while a well-supported supposition, was not established beyond reach of attack. Until our times the chemist or physicist was content to work with some billions of atoms at a time, and had to deduce the behaviour of the individual atom from the behaviour of matter in bulk. To-day science has discovered methods of dealing with single atoms, and small numbers of atoms, that have enabled us not only to demonstrate the existence of atoms with a certainty as great as can attach to any fact established by evidence, but also to show that the atom itself has a structure, with far-reaching results that have effected the whole outlook on inanimate matter.

There is no hope of seeing atoms, however great be the improvements in microscopes, for light itself has a structure which is too coarse to permit of this. The existence of atoms and their motions is, however, revealed by a simple phenomenon discovered by the botanist Brown a hundred years ago, but only recently turned to account. Microscopic particles in a liquid do not sink and lie still on the bottom of the vessel, but are maintained in a ceaseless motion at a very small distance above it, the number diminishing as we go up. This motion is due to the impacts of the atoms; with large particles the impacts average out, but with small ones the irregular agitation makes itself visible. By studying the motions, produced by molecular agitation, of particles about a hundred-thousandth of an inch across, the number of atoms in a drop of liquid, and their individual weight can be found. The size can be found, strangely enough, by measuring the force required to push a gas through a tube. All measurements in size, number and weight are confirmed by other methods.

#### RADIUM AND RADIO-ACTIVE SUBSTANCES

The discovery of radium (and radio-active substances in general) provided us with a source of very swift particles, called alpha particles, which are shot out spontaneously with uniform velocity. Using these particles as probes, which thrust their way right through atoms in virtue of their great energy, Rutherford found that the weight of

each atom is concentrated in a minute nucleus, which is only about a ten-thousandth as big across as the atom itself. This nucleus has a positive charge, which holds in its neighbourhood the swarm of electrons which constitute the remaining part of the atom. The nucleus contains the secrets of atomic individuality: its charge determines the chemical nature of the atom. The lightest known nucleus is that of the hydrogen atom, to which the special name "proton" has been given. Other nuclei consist of close combinations of protons with electrons, the protons exceeding the electrons in number, so that the net charge is positive. The researches of Aston have shown that atoms with a given chemical behaviour, say atoms of chlorine, do not all have the same weight, as we believed before the war, but that the weight of an atom and its chemical properties are, to a certain limited extent, independent, and the atomic weights of many chemical elements are merely averages of atoms of different weight.

#### TRANSMUTATION

If we can change the nucleus of an atom, by adding or subtracting a proton or an electron, we can change the chemical nature of the atom, or, to use the old phrase, transmute the elements. At the same time, enormous energy changes would be involved. The nuclei of radioactive atoms break up of their own accord, and do, relatively to the amount of substance in question, deliver vast amounts of energy, generally spread over a large time. Using the alpha particles already mentioned, which gave an enormous local concentration of energy, Rutherford has established that the nuclei of light atoms can be broken, but the quantities which undergo transformation are very much too small to be weighable. Various transmutations, especially that of mercury to gold in minute quantities, have been announced by other workers from time to time, but so far no transmutations except those affected by radioactive means have been able to withstand criticism. The breaking of the atomic nucleus by electrical methods, and the transmutation of elements, which is the same thing, is still to seek.

The PRESIDENT, after remarking that Professor Andrade had paid a great compliment to his listeners, called upon Dr. Haas to propose a vote of thanks.

Dr. HAAS said he had expected an entertaining evening, and his expectation had been realised. Everybody would agree that first and foremost Professor Andrade was a humorist. He was a first-rate exponent of his subject and could condense a lot of information; he was also a conjurer and delighted in putting ingredients together. Dr. Haas expressed gratitude for the lecture, and had great pleasure in proposing a vote of thanks.

Mr. MELHUISH, in seconding, said he had heard the lecture with delight. The lecturer had made his subject extremely clear and lucid. Referring to transmutation, Mr. Melhuish said that Professor Andrade himself excelled in this art, being able to transmute difficult problems into extremely simple ones.

The vote of thanks was carried with acclamation.

#### Branch Meetings

**Bradford.**—The winter session of the Bradford and District Branch was opened on October 10. Mr. G. Penty (chairman) introduced a discussion on *Proposed Revision of the Poisons Schedule and Suggested Limitation of Apprentices*. The matter arose out of his report as one of the delegates to the recent British Pharmaceutical Conference meeting at Dublin. After paying tribute to the exceedingly kind hospitality of the Irish chemists, Mr. Penty proceeded to give an outline of Mr. A. H. Jenkin's paper on the proposed revision of the Poisons Schedule. He said the object of Mr. Jenkin was to establish a test or standard by which poisonous substances could be classified under one comprehensive scheme. He thought the idea would be a better safeguard for the public. In view of the possibility of revision in the near future it was imperative that chemists should evolve some scheme instead of leaving Government officials to impose upon them. In the matter of limitation of apprentices, Mr. Penty agreed that there was something to be said for both sides. Young persons wishing to enter pharmacy would



be held back by having to wait for an opening, and employers in small businesses might be debarred from getting the little help an apprentice could give. Mr. Penty gave some figures which he had obtained from the Society, indicating that the peak in the number of apprentices had been reached and passed:—

Year	Chemists and druggists on Register	Members of Pharmaceutical Society	Number of Apprentices	Number of Student-Associates
1922 ..	19,193	11,282	1,228	1,642
1923 ..	19,712	11,554	1,602	1,578
1924 ..	19,609	11,800	1,680	1,674
1925 ..	19,985	12,442	2,049	1,880
1926 ..	20,542	12,942	2,413	1,967
1927 ..	21,045	13,566	1,764	1,965
1928 ..	21,660	14,000	1,211	1,621

In reply to a question by Mr. L. B. Sutcliffe, Mr. Penty agreed as to the absurdity of having to label "Poison" everything which contained the minutest quantity of a scheduled poison. It was suggested by Mr. J. W. Thorpe that the fourth part of the proposed schedule was most important to chemists. Mr. R. T. Silson said he fancied no such revision would come into being except after a hard fight against vested interests. In answer to Mr. Silson, Mr. Penty said it was not proposed to interfere with the Dangerous Drugs Acts. Mr. D. L. Carter suggested that the only scope for utilising their assistants and apprentices was by pharmacy securing the monopoly of dispensing. Mr. Penty agreed, but feared that it was not likely to be obtained yet. Mr. Fish said he thought the reason for the excess of qualified assistants lay at the door of the easy training system of to-day.

**East Metropolitan.**—The annual meeting of the East Metropolitan Branch was held on October 24, Mr. S. Clifford Jones in the chair. A *résumé* of the year's work was given by the secretary. Mr. F. Bursell, the secretary of the junior section, presented a report showing that this section had been very active. The chairman congratulated Mr. Bursell, and welcomed Mr. J. J. Wheatley, the new junior secretary. The retiring officers were thanked for their services. The officers for the ensuing year are as follows:—*Chairman*, Mr. H. F. Hodgson; *Vice-Chairman*, Mr. C. H. Cooper; *Secretary*, Mr. W. E. Gaze; *Treasurer*, Mr. W. T. Graham; *Committee*, Messrs. Beardsley, Gray, Gwinn, Kirkpatrick, Maxey, Reed and Thomson; *Auditor*, Mr. G. A. Tocher. *Benevolent Fund Secretary*, Mr. S. C. Jones.

**Glasgow.**—A meeting of the Glasgow and South-Western Scottish Branch was held recently. Mr. W. Spence Culbert, who presided, introduced Mr. J. P. Gilmour, editor of "The Pharmaceutical Journal," who, in the course of an address on *Mergers and Submersers in Pharmacy*, traced the genesis, growth, incidence and significance of the proprietary articles trade, the relation of the chemist to the sale of these commodities, and the work of influence of the P.A.T.A. in that respect. This was followed by a short critical study of the rise and development, since the seventies of the last century, of the limited liability company system and trading, the entrance of co-operative societies and departmental stores into the drug trade, the advent and extension of the multiple shop services, and the still more portentous phenomenon of the application to the manufacturing wholesale and retail drug trade of the principles and policy of the concentration of capital, and the consolidation of vested interests in sympathy with the general trend of new financial ideas. Outside competition and under-selling were also more prevalent and detrimental than ever before, so that in pharmacy the situation as a whole called urgently for special defensive and protective measures. Among proposed remedies in this country, the British Dominions and the United States of America were (1) co-operative arrangements to enable retailers to cope, in buying and selling, with big business concerns; (2) the limitation of entrants into pharmacy and into business as retail chemists and druggists; (3) fresh legislation more clearly to define and so to delimit the business and practice of a chemist and druggist, with special reference to the nature and scope of the sale of drugs and medicines, both by wholesale and retail, the separation of dispensing from prescribing and vice versa, and also to regulate the manufacture and sale of all proprietary articles. For these and cognate

purposes the existing pharmaceutical organisations must not only be kept wound up to concert pitch, but also considerably strengthened and "activated." Above all, there must be unswerving allegiance, solidarity and sustained intelligent action on the part of the rank and file of the respective organisations. A discussion followed, to which Messrs. Chapman, Flett, Logan, Arthur, Guthrie, Duff, Hill, A. B. Gilmour, and the chairman contributed. On the motion of the vice-chairman, a cordial vote of thanks was awarded to Mr. Gilmour for his address.

**Plymouth.**—The annual meeting of the Plymouth Branch was held on October 31, Mr. J. H. Lewis in the chair. A discussion took place regarding the whist drive and dance, which it was decided to hold in the New Year, and a committee was appointed to make the necessary arrangements. Mr. J. H. Lewis, in a review of the past year's work, said they had been successful in obtaining comfortable new rooms, and thanks were due to Mr. F. A. Spear for his assistance in the negotiations. Mr. Spear proposed that Mr. Lewis should continue another year. Declining the offer with thanks, the chairman said he would like to propose Mr. Cyril Condy U'Ren, who had been one of the most active members of the association and carried out his work with conspicuous success. This was seconded and carried unanimously. Mr. C. C. U'Ren, taking the chair, thanked them for the honour conferred on him. He moved a vote of thanks to the late chairman for his work during the past year. The vote was seconded and carried. Mr. U'Ren then proposed that Mr. T. B. Harvey continue as *Secretary*. This was seconded and carried. Mr. C. H. Attewell was re-elected *Treasurer*. A new *Committee* was elected as follows: Mr. C. C. U'Ren (chairman), Messrs. J. H. Lewis, C. J. Park, F. J. Barge, A. C. Marrow, B. T. R. Shelton, B. J. Woodrow, G. D. Kirkness, C. W. Collins, A. H. Ware, T. B. Harvey, A. Downing, O. H. Attewell.

**Portsmouth.**—At the sixth annual meeting of the Portsmouth and District Branch, held on November 6, continued progress was recorded. Mr. G. W. Darling presided. The reports of the chairman and Mr. F. Hemming on the British Pharmaceutical Conference at Dublin, which they attended as delegates, were followed with interest, and the opportunity was also taken to present prizes to Messrs. C. E. Fry and W. R. F. Atterbury for their successes at the recent students' associated examination. Mr. W. H. Bown dealt with the activities of the sports and entertainments committee during the past year, and the work of the Branch was also favourably reviewed by the secretary, Mr. F. H. Ruoff, who referred in particular to the satisfactory state of the Benevolent Fund. The branch balance sheet showed a healthy balance in hand. The following were elected officers for the ensuing year: *Chairman*, Mr. W. L. Egerton; *Vice-Chairman*, Mr. J. W. Rogers; *Treasurer*, Mr. F. Hemming; *Secretary*, Mr. F. H. Ruoff; *Auditors*, Messrs. Eyres and Rhodes. The *General Committee* was reconstituted as follows: Messrs. W. F. C. Adams, J. Arkell, W. R. Atterbury, W. H. Bown, G. W. Darling, C. Fry, A. W. Goddard, T. A. Johnson, E. D. Lewis, H. A. Mecoy, W. L. B. Murray, and Stewart, with the officers *ex-officio*.

### Unqualified Men Posing as Qualified

We have received the following communication, dated November 7, from Mr. H. N. Linstead, secretary of the Society:—

The Council of the Pharmaceutical Society wishes to draw the attention of all pharmacists to the fact that there appears to be at the present time a number of unqualified men who are attempting to obtain posts by representing themselves to be qualified. Wherever such cases have come to its notice the Council has instituted proceedings and has obtained convictions. . . . The Council wishes to emphasise that whenever a qualified assistant is engaged he should be required to produce his certificate of qualification. In the event of his not being able to do so, or of any doubts as to his qualification arising, particulars should be sent to this address, when definite information will be at once given. Registers for the current year are in the possession of the secretaries of all the Society's branches, who have, therefore, the names of all persons registered before January 1 of any year.



## Our Town Traveller

THE CHEMIST AND DRUGGIST Town Traveller, who has been lying in limbo for some time past, recently resurrected himself and "got busy." One of his first visits was to a

### New Centre for Better Service

At the new premises of Brooks and Warburton, 232-240 Vauxhall Bridge Road, London, S.W.1, where I paid a visit recently, I was cordially welcomed by Mr. J. T. Warburton, managing director, from whom in the course of conversation I gleaned a few facts about this firm of proprietary-medicine distributors and their new building. About ten years ago the firm commenced business in Orange Street, Haymarket, S.W.1, subsequently removing to premises at 40-42 Lexington Street, W.1; and finally, when I called on them, another removal had been completed, and the firm was installed in their new building near Victoria. These new premises have been erected on modern lines, and construction has been carried out in reinforced concrete. The building comprises five floors and basement, with a frontage in Vauxhall Bridge Road of about ninety feet. Twenty-five steel-frame windows are provided at the front, and there are two entrance doors, one leading to the general offices, and the second for the delivery and despatch of goods. A stairway at each wing leads up to all floors, and an electric lift has been installed at the goods entrance for rapid loading or unloading from all floors and the basement. I made my way upstairs to the general offices on the first floor, and was shown into the office of the managing director. Although modernised equipment has been introduced in all departments, Mr. Warburton is rather conservative as regards his private office furniture, and I was informed that the roll-top desk, chair, and square of Turkey carpet had accompanied him in all removals.

The whole of the first floor is devoted to the administration, and running along one side are several smaller offices dedicated to the business of some particular agency, English or American. Messrs. Brooks & Warburton hold, among others, the following sole agencies:—Sandoz Chemical Works; G. W. Carrick Co.; Mead, Johnson & Co.; Pinoleum Co.; Arlington Chemical Co.; Carbona Products Co. Occupying the central position of this large office are two rows of steel shelving, flanked by numbers of desks and typewriters, each typist having her own section of shelving for stationery, etc. A telephone exchange occupies one corner of the room, and here I may conveniently remind readers that the new 'phone number is: Victoria 9652; the telegraphic address: Amedrusto, Churton, London; and the cable address: Seebrooks, London. Each typist has a telephone at her elbow to take down 'phone orders. The aim of the firm is to give service—effectively and quietly—and it is to this end that a new building has been erected. A reception room for commercial travellers is to be fitted up on the first floor; it seems to be in accord with the spirit of the times that knights of the road should have a reception, which is not devoid of courtesy. This floor, like the rest of the building, is electrically heated.

From the first floor I was led down to the ground floor, which is a storeroom organised with modern equipment. Running lengthways at the front and rear walls are the assembling counters, and the centre space is occupied with sets of deep steel shelving arranged in parallel rows and set at right angles to the counters. Available wall space is also occupied with steel shelving. Each section of shelf is lettered or numbered, and the index system provides a means of rapid location of any particular product. After passing through this room I followed my guide down into the basement, with its assortment of packing-cases, and up the stairway again on the left wing to the second, third and fourth floors in turn. These are all storerooms and are floored with concrete. From the main storeroom on the top floor doors lead off into smaller rooms. One of these is equipped as a small manufacturing laboratory for the preparation and packing of a certain speciality; a second is used as a store for Sandoz products; while other rooms provided include a men's room, a girls' room for the use of employees during the lunch hour, and a rest room for the girls in case of illness.

Two doors, one at each end of the large storerooms, communicate with the stairway at each end of the building. Each door is protected by two steel shutters in the exterior. The whole building is fireproof, and the absence of woodwork is a noticeable feature, all fixtures having been constructed, where practicable, of steel.

A visit to the flat roof, from which a good view is obtained of the Victoria district, brought my tour to an end, and, as I went downstairs, Mr. Warburton explained the advantages of the electric heating system. This form of heat dispersion is particularly well adapted to a place where some hundreds of proprietary medicines, etc., are stored, and the majority of chemists are well aware of the caution printed on many packages: "Don't stow near boilers or live steam pipes." Steam or hot water as heating agent has the disadvantage that heat distribution is not so easily controlled; this is entirely obviated with the electric system employed, and thus all packages are kept under ideal storage conditions without danger by heat. In conclusion, I was also told that the area of each floor is roughly 3,000 square feet, and that the total number of square feet available for storage purposes is about 20,000. This new building for the distribution of proprietary articles justifies the claim to be "a new centre for better service."

### The New Berton Premises

The new factory recently completed and occupied by Arthur Berton, Ltd., manufacturers of surgical dressings and chemists' sundries, 256-260 Old Street, London, E.C.1, has a total floor space of two acres, and, including the basement, comprises seven floors. In walking round the factory the visitor is struck by the exceptionally good lighting arrangements. That members of the staff are well catered for is evident by the fact that the top floor contains an excellent canteen for the workers and a dining room, complete with wireless, for the senior staff. Only part of the first floor is used for offices and showrooms, the latter containing a good selection of perfume sprays, puff bowls, puffs, manicure sets, dressing cases, etc., for the Christmas trade. A visit to the spacious basement discloses large stocks of crude cotton, mostly from the Lancashire mills, waiting to be carded on the special machines into white, soft cotton-wool. This wool is then taken to the cutting and packing rooms and turned out in the form most familiar to chemists. Every package is weighed net, the wrapping paper being counterpoised. There are various types of cutting machines employed, each giving a perfectly clean edge to the wool. A surprising feature of these rooms is the almost total absence of dust, due, no doubt, to the excellent ventilation of the building. All kinds and sizes of bandages are turned out in the bandage department, the chemists' "own name" pack being a special feature. Sterilising apparatus of the latest manufacture is employed. Arthur Berton, Ltd., are also large manufacturers of sanitary towels. A visit to the dispatch room is very interesting, and the precautions taken to expedite the sending out of goods, and to ensure perfect accuracy in checking, are noteworthy. The construction of the building allows the company's lorries to draw right into the warehouse, thereby avoiding congestion. One feature of which Messrs. Berton are justly proud is the baling-press, which turns out export bales *par excellence*. The stockrooms are a model of neatness, each article having its proper place and being easily accessible. In this department are to be seen large stocks of surgical dressings of all kinds, hot-water bottles and covers, and fancy goods. Transport of goods from one department to another is carried out by means of large electric lifts. A department of the business which appears to be working at pressure is that engaged in the production of hot-water bottle covers, fancy goods and puffs. The covers are turned out in all shapes and sizes, and with fancy designs worked in, if necessary. The making, by hand, of swansdown powder-puffs is an interesting feature of this department. Puffs are sewn on handkerchiefs or mounted on handles, and the variety of colours available is practically limitless. A visit to this modern factory is well worth while, and the management are happy to receive customers who care to call.



## Trade Notes

POND'S EXTRACT Co., 103 St. John Street, London, E.C.1, have prepared special gift boxes of their preparations for Christmas trade.

HOUBIGANT have introduced a new perfume under the title of Bois Dormant. It is obtainable from Parfumeries de Paris, Ltd., Acton, London, W.3.

PUFFS suitable for Christmas trade are illustrated in this issue by William Edwards & Sons, druggists' sundriesmen, 14-18 Nile Street, City Road, London, N.1.

ADVERTISERS will find much to interest them in a booklet entitled "Resultant Advertising" which may be obtained free of charge from Merritt Advertising Service, Ltd., 46 Charing Cross, London, S.W.1.

VIVATONE BEAUTY PRODUCTS.—André Girard & Cie (England), Ltd., St. Albans, give some particulars regarding their preparations and details of a window display offer in the advertisement pages of this issue.

SELECTED hand-picked Alexandrian senna pods are packed in cartons for sale by chemists at a popular price by Sudex Co., London, S.E.1. The distributors are Tibo Products (International), Ltd., Audrey House, Ely Place, London, E.C.1.

MR. JOHN J. BRYANT, F.C.S., who was for many years a chemist in the toilet soaps and perfumery trades, has opened a business trades agency at Artillery House, 226 Bishopsgate, London, E.C.2, and invites inquiries from firms who wish a small display at a convenient London centre.

OLIVE OIL.—Charles Zimmermann & Co. (Chemicals), Ltd., 9-10 St. Mary-at-Hill, London, E.C.3, are the sole importers to this country of the olive oil of Barral & Fils, Salon de Provence, France. The oil is packed in bottles and tins in a variety of sizes ranging from 2 oz. to 5 gallons.

S.U.P. 36, for the treatment of colds, influenza, pneumonia and other inflammatory conditions, is the subject of an informative brochure published by The British Drug Houses, Ltd., Graham Street, London, N.1. A copy of this publication will be sent to any C. & D. subscriber who writes for one.

PRICE REDUCTION.—Gilmont Products, Ltd., 35 Crutched Friars, London, E.C.3, make an announcement regarding a reduction in the price of New Mix tooth paste elsewhere in this issue and at the same time ask chemists to return certain old stock. All returns should be sent to the factory at the address given in the advertisement.

SOLPORT BROTHERS, LTD., 184-190 Goswell Road, London, E.C.1, have sent us a specimen package of the Portia finger puttee, a novel form of finger bandage which comprises a strip of ordinary bandage with a piece of boric lint at one end and some adhesive plaster at the other. Packed in greaseproof envelopes, these self-fastening finger puttees should find a ready sale.

BUTYWAVE Co., 10 Tachbrook Street, London, S.W.1, held an advertising dance at Birmingham on November 8. This is part of the firm's policy of not only getting their products known to the public, but also meeting on a social ground those who distribute their preparations. Mr. W. Fletcher, chemist and druggist, was present to meet the chemists, and approval was expressed of the value of such functions. Upwards of 800 visitors took part in the event.

A CHEMIST'S STOCK does not as a rule offer so great a selection of Christmas presents for a man as it does for a lady, yet it is reasonable to assume that there is no great discrepancy between the number and value of the gifts made by the "sterner" sex to the "fair" sex than vice versa. Most ladies, however, would regard the giving of a shaving brush or a razor as rather uninteresting, particularly since in these days almost every man possesses at least one of each. Show these customers the Allegro automatic honing and stropping machine, explain how it works and the advantages of using it and they will soon realise that this is a piece of apparatus which "Mr. Everyman" will appreciate every day of the year. Made by the Allegro

Machine Co., 23A Old Bond Street, London, W.1, this apparatus can be adapted for treating either the Gillette type, Auto-stop or Durham-Duplex blades. The machine is extremely well made, measures 6 in. by 3 in. by 1½ in., and should last for years. It contains the stone for honing, the leather for stropping, and requires no attention other than giving the stone an occasional rub with the emery paper supplied. Leaflets giving further particulars of the Allegro and of the leather travelling case will be supplied on request.

## Trade-Mark Applications

The figures in parentheses refer to the classes in which the marks are grouped. A list of classes and particulars as to registration are given in "The Chemist and Druggist Diary," 1929, p. 333.

(From "The Trade Marks Journal," October 30, 1929.)

- "KOSMOS" with device resembling seated lion with wings and human face, using pestle and mortar; for chemicals (1). By Kosmos Photographics, Ltd., Balfour House, Finsbury Pavement, London, E.C.2. 505,380. (Associated.)
- "KALSOGEN"; for chemicals (1). By Florence E. Gregory, 26 Colson Road, East Croydon. 506,073. (Associated.)
- "OPALOGEN" and "AZETOPAL"; for chemicals (1). By I.G. Farbenindustrie A.G., Mainzerlandstrasse 28, Frankfurt-on-Main, Germany. 506,640.
- "RIDDUM" with descriptive letterpress and name and address of applicants ("Riddum" disclaimed); for insect-destroying preparations (2). By C. McKenley Cameron, 46 Market Street, Stoneclough, nr. Manchester. 504,680.
- "BLISSOL"; for disinfectants and veterinary medicines (2). By Bradley & Bliss, Ltd., 6 London Street, Reading. 506,098.
- "NERVOHURST"; for a medicine (3). By W. Hurst, Oxford Buildings, Harrogate. 503,422.
- "RAYEAST" with device of sun rising above clouds; for yeast preparations (3) and (42). By Rayeast, Ltd., Cubley Brook Brewery, Mortimer Road, Penistone, Yorkshire. 504,563/564. (Associated.)
- "ZEPHROL"; for medicinal chemicals (3). By May & Baker, Ltd., Church Road, Battersea, S.W.11. 506,453.
- "CYPROL BRAND"; for medicinal chemicals (3). By H. R. Napp, Ltd., 3 & 4 Clement's Inn, Kingsway, London, W.C.2. 506,572.
- "HARPIC"; for toilet paper (39). By Harpic Manufacturing Co., Ltd., 2-14 Staple Street, London, S.E.1. 504,844.
- "SMILER" under portrait of Pamela Powell; for milk preparations (42). By Cow and Gate, Ltd., Stoke Road, Guildford. 503,707.
- "MOOCREME"; for food substances (42). By Vita-Cream, Ltd., 2 Stockholm Road, South Bermondsey, S.E.16. 503,806. (Associated.)
- "VELTIT" on diamond shape; for mineral waters, etc. (44). By F. J. M. Bengue, 24 Fitzroy Street, London, W.1. 505,952. (Associated.)
- "KLENOLENE"; for a stain-removing preparation (47). By J. Winfield, 101 St. Peter's Road, Leicester, and L. H. Strange, 135 Kingsway, East Sheen, S.W.14. 500,976.
- "THAUSOL" and "THORSOL"; for detergents (47). By Thawpit, Ltd., 38 Gordon Square, London, W.C.1. 501,999/502,000. (Associated.)
- "VEROSAP"; for all goods (47). By Osborne, Garrett & Co., Ltd., 51-54 Frith Street, London, W.1. 506,472.
- "JAVOL"; for all goods (48). By Exterikultur A.G., Ostseebad, Kolberg, Prussia. 502,778.
- "WILLIAMS MUG SHAVING SOAP" with device of mug of lather and brush, on circle and square; for shaving soap (43). By The J. B. Williams Co., Glastonbury, Connecticut, U.S.A. B499,643.
- "J. AUBERTIN" facsimile signature; for perfumery, etc. (48). By Parfums Aubertin Société Anonyme, 56 Rue du Faubourg Saint Honoré, Paris. 504,462.
- "BUTYWAVE FOR BEAUTIFUL WAVY HAIR" with device of girl's head on oblong and cut-out of wavy lines; for hair-waving powders (48). "SET FOR MEN" on device including demon-like head ("Set" disclaimed); for a hair preparation (48). By The Butywave Co., 10 Tachbrook Street, London, S.W.1. 505,633/632. (Associated.)
- "WINBLOOM"; for perfumery, etc. (48). By Carter & Sons (Sheffield), Ltd., 335 Attercliffe Road, Sheffield. 506,316.
- "TOUCAN"; for perfumery, etc. (48). By G. W. Goodwin & Son, Ordsall Lane Soap Works, Manchester. 506,630.



## Births

Notices for insertion in this column must be properly authenticated.

**HOBART.**—At the nursing home, Newbury Park, Ilford, on November 11, Winifred (*née* Beasant), the wife of Frederick G. Hobart, Ph.C., of a son (John Beasant).

## Deaths

**BATHE.**—At Exmouth, on November 11, Mr. William Bathe, chemist and druggist, late of Torquay, aged seventy-eight.

**BRACKENBURY.**—At Bardney, Lincoln, on November 3, Rebecca, widow of the late Mr. Elijah Brackenbury, chemist and druggist, and mother of Mr. W. R. Brackenbury, chemist and druggist, 219 Newport Road, Middlesbrough, aged eighty-eight.

**HALLIWELL.**—At Barrow-in-Furness, recently, as the result of a motoring accident, Mr. John H. Halliwell (John S. Halliwell & Co., Ltd., wholesale chemists), 17 and 19 Breck Road, Liverpool.

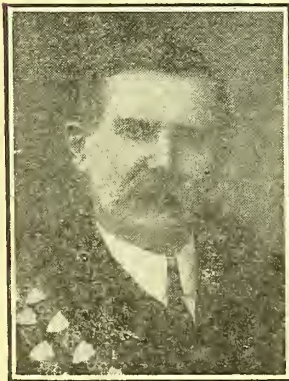
**HARTLAND-SWANN.**—On November 6, in a motor accident, Mr. Conrad Harry Hartland-Swann, second son of Mr. L. H. Hartland-Swann (a director of Lever Brothers, Ltd., and other companies), aged twenty.

**HOLDGATE.**—At the Post Office, Cottenham, on October 30, suddenly, Mr. Arthur Holdgate, chemist and druggist. Mr. Holdgate was a native of King's Lynn. He passed the Minor examination in 1873, and commenced business in Cottenham a few years later. He had been for many years an active worker at the Parish Church, where he had acted as warden.

**IZOD.**—On October 31, Mr. James Hickman Izod, chemist and druggist, 93 Church Road, Upper Norwood, London, S.E., aged seventy-three. Mr. Izod succeeded his father, the late Mr. J. Izod, who established the pharmacy seventy-five years ago.

**KEELEY.**—Recently, Mr. James Phillip Keeley, chemist and druggist, 525 Lytham Road, South Shore, Blackpool, aged fifty-seven. Mr. Keeley was in business in Blackpool for thirty-five years, and was a prominent member of two golf clubs. He leaves a widow, a son and daughter.

**MARTIN.**—At his residence, Hillside, Helston, on November 6, Alderman John Bennet Martin, J.P., Mayor of Helston, aged sixty-six. Mr. Martin



MR. J. B. MARTIN, J.P.

had been suffering from heart trouble for some time, but his death was quite unexpected, and he attended to business and public duties on the day before his death. Mr. Martin, who was a native of Coverack, had been in business at Helston for over forty years. Since 1901 he had been a member of Helston Town Council without a break, and he was Mayor on previous occasions, being elected to that office first in 1919 and again in 1926, while his re-election in the two following years was at the unanimous wish of his fellow councillors. By his death the Helston Wesleyan Church has lost a devoted worker. Mr. Martin was also a Past Master of "True and Faithful" Lodge of Freemasons, No. 318, and of "St. Michael's" Lodge of Mark Master Masons, and held office in other local bodies. He leaves a widow, a son, and two daughters. All sections of the community were represented at the funeral, which took place on November 8, after a service at Helston Wesleyan Church. Floral tributes were sent by the Cornwall Pharmaceutical

Committee, the directors of May, Roberts & Co., Ltd., and several local institutions.

**PHILLIPS.**—On November 2, Mr. James Arthur Phillips, chemist and druggist, of Knowles & Phillips, chemists, 47 Minorities, London, E.1, aged seventy-eight. Mr. Phillips passed the Qualifying examination in 1875, and in the same year purchased, jointly with his partner, the late Mr. Richard Knowles, the business then carried on by Mr. William Good, and founded in 1696. For many years he travelled on the South Coast on behalf of Whinfield, Hora & Co., a wholesale branch of his firm. Mr. Phillips took an active interest in local public affairs. The funeral took place at West Norwood Crematorium on November 6.

**ROBINSON.**—On October 28, Mr. John Robinson, chemist and druggist, and sub-postmaster, 125 South Lambeth Road, London, S.W.8, aged sixty-six. Mr. Robinson, who was well known locally, was apprenticed to Mr. J. F. Edisbury, Wrexham, in 1879, and in 1883 came to London as assistant to his uncle, the late Mr. Henry Bate, chemist and druggist. On the death of the last-named, Mr. Robinson took over the sole control of the business, which he has since conducted under the style of Bate and Robinson. The funeral, which took place at Norwood Cemetery on October 31, was marked by many manifestations of sympathy on the part of the residents. Mr. Robinson was married twice, and is survived by a widow as well as two daughters and a son by the first marriage.

**THOMPSON.**—Recently, after an operation, Mr. G. E. Thompson, Grantham Road, Stockwell, London, S.W., for thirty-two years traveller for Smith & Co., manufacturing chemists, Borough, London, S.E.1, aged sixty-four.

## Personalities

**MR. K. B. MAVLANKAR**, of Yiewsley, Middlesex, has returned to London after his trip to India, and has resumed his business activities.

**MR. JAMES ASPELL**, chemist and druggist (Davies, John and Aspell, chemists), Bath, recently lectured before the local Rotary Club on the "Rise and Progress of Pharmacy."

**MR. R. CECIL OWEN**, B.Sc., president of the Chester Rotary Club, addressed the Bermondsey (London) Rotary Club, on November 11, on "What it means to be a Rotarian."

THE first prize in "The Most Charming Woman Competition," recently organised by A. & F. Pears, Ltd., Isleworth, has been won by Miss Marjorie Ross, Richmond, Surrey, to whom the sum of £1,400 has been awarded.

**SIR WILLIAM WILLCOX**, M.D., Government Visitor to the Pharmaceutical Society's examination in London, had the misfortune to fracture his leg, on November 11, owing to his horse falling on a slippery road when on the way to a meet of the Cottesmore Hounds.

**MR. THOMAS HARLEY**, chemist and druggist, 55 South Methven Street, Perth, and Mrs. HARLEY are leaving Southampton on November 29 by the "Carnarvon Castle" for South Africa, partly on a business trip, but chiefly for Mrs. Harley's health. Letters addressed c/o Lennon, Ltd., manufacturing chemists, Cape Town, will be forwarded up to the middle of February.

**SERGEANT THOMAS RICKETTS**, Royal Newfoundland Regiment, who is the youngest holder of the Victoria Cross, is studying for a pharmaceutical qualification, after attaining which he hopes to commence business on his own account at St. John's, Newfoundland. He attended the Prince of Wales's banquet on November 9. Sergeant Ricketts is twenty-eight years of age, and won his Cross for an exploit in the Ypres sector in 1918.

## Information Department

Postal or telephone information with respect to makers or first-hand suppliers of the undermentioned articles will be appreciated.

C/3110. Ironal	P/411. Sarcinol (Wait's)
F/1311 Meloids (not Meloids)	W/1111. Talbot's iodine
P/211. Ramanol	



## Observations and Reflections

By Xrayser III

### Your Report

of the latest meeting of the Council of the Pharmaceutical Society (*C. & D.*, November 9, p. 552) can hardly be regarded as satisfactory, inasmuch as it tells us of little beyond purely formal business. Sympathetic allusions to the death of a worthy Scottish pharmacist were succeeded by an election of members, the appointment of examiners (many of whom, by the way, are merely names to most of us), a non-committal resolution about pharmaceutical service in the Army, an explanation of unimportant alterations in scholarship regulations, and colourless reports from several committees. This can hardly be described as a brilliant performance, at a time when we are all thirsting for news about various important matters; but I am reminded that we have been told on previous occasions that much really important business is transacted by the Council when reporters are not present, so possibly the proceedings at this month's meeting were not so entirely innocuous as would appear from the published reports. If it be a fact that there are matters dealt with in the absence of reporters which might safely be disclosed to us if reporters were present, it seems to me that speedy arrangements should be made to provide for reports of the Council proceedings being rendered adequately informative to members of the Society. Surely it is not beyond the wit of man, even as embodied in the person of pharmaceutical officials, to devise means of letting us know more about the activities of our elected representatives on the Council. I hear of disclosures being made by councillors or officials at meetings of the Society's branches; but we cannot all be present on all those occasions, and the situation seems, therefore, to require different handling. It may be, of course, that there was nothing unusual to report at the particular meeting to which I refer; but there is an undoubted air of repression attaching to what is published, in the official account of the proceedings as well as yours, and one would like to be as well informed as those who happen to come into closer contact with the people who know all there is to know.

### Analysts' Reports

always provide me with interesting reading, and the latest annual report of the Salford analyst is no exception in that respect (*C. & D.*, November 9, p. 548). Mr. Bagnall makes a useful point when he directs attention to the serious effects of the oversight that led to the omission of the word "drug" from the Section of the Food and Drugs (Adulteration) Act, 1928, which deals with the taking of samples on delivery. I am not so sure about the value of his remarks on cod-liver oil concentrations. Why should we be denied the use of preparations known to contain the vitamins of cod-liver oil, because there may be "any number of constituents of the oil," as yet unknown, which may have beneficial effects as great as those of vitamins? Apart from the extreme unlikelihood of there being "any number" of unknown constituents of medicinal value in cod-liver oil, Mr. Bagnall appears to reveal an unreasonable prejudice against constituents of proved value, and I see no ground for denying people the advantages of the obvious because of our ignorance of what may be purely hypothetical. Again, though I am not personally interested in any proprietary medicine, I fail to appreciate the force of Mr. Bagnall's arguments in favour of such extreme control of the proprietary-medicine business as he suggests. His classification of proprietary medicines is crude and incomplete, and he appears to overlook the fact that what he describes as "genuine drugs synthetically produced" may be the subject of charges of profiteering to as great an extent as compounded preparations of secret composition. I am afraid, too, that the repressive system he would introduce might have the effect of depriving the public of many valuable remedies, now existent or potential.

### The History

of drugs furnishes many instances of that curious phenomenon of ebb and flow, of periodicity, so common in nature in general, and so manifest in human affairs for those who are quick to perceive it. Your Commercial Compendium of November 9 and of a fortnight ago provides an illustration in the case of "Salicin" and "Salix." It is just a hundred years ago since Leroux first obtained salicin in a pure state. At first this new principle was welcomed as a substitute for quinine, because of its tonic properties and its value in the treatment of rheumatic affections. In a short time it was employed as not only a substitute for the more expensive drug but as an adulterant. The value of willow bark as an alternative to cinchona bark was pretty generally recognised in the latter half of the eighteenth century; it was, therefore, to be expected that the isolation of salicin would bring it into comparison and competition with the cinchona alkaloid. By the middle of the nineteenth century salicin had secured a place of its own in the treatment of certain febrile disorders; but it was not until 1885 that it was admitted to the British Pharmacopœia. From that time for about ten or fifteen years it became a remedy held in high esteem by many practitioners as of the greatest value for the treatment of influenza and rheumatic fever. During the influenza epidemics of 1890-94 it was extensively employed with most satisfactory results. An account of the success which had attended its use during thirty years was published some ten years ago by Dr. E. B. Turner. At the height of the epidemic of 1892 Dr. T. J. MacLagan published a paper ("Nineteenth Century," February, 1892) for general perusal, in which he so conclusively proved the great usefulness of this drug that it is difficult to understand how it came about that it fell into such comparative neglect for so long a period.

### During this Year

I believe, there has been a marked revival in the use of salicin. To how great an extent I do not know beyond this—that some manufacturers have found a much greater demand than is usual. It may be that salicin is a specific antidote to the poison of rheumatic fever; and one may be tempted to ask, very timidly, in these sceptical times, if there are such things as natural antidotes, by which I mean the provision by "nature" of remedies in the localities where diseases are begotten. The "doctrine of signatures" comprises in the phrase notions which have permeated mankind throughout all the ages. This particular drug, the willow, serves as an example of this, and perhaps it may serve as an indication of the direction in which to look for the correlation of not only human diseases and "natural" remedies, but also of vegetable diseases and self-produced antitoxins. The persistence of these notions appears in MacLagan's remarks, which are as follows:—"One remarkable fact in the history of malarial fevers is that the poisons which cause them and the remedy which cures them are naturally produced under similar climatic conditions. . . . Studying rheumatic fever from this standpoint, and regarding it as of malarial origin, it seemed probable that a remedial agency capable of curing it might most hopefully be looked for amongst plants which flourish under climatic conditions allied to those which produce the rheumatic poison. . . . On reflection it seemed that the various species of willow were the plants which most flourished under such circumstances. Among the willows, therefore, a remedy for rheumatic fever was sought. Most willows contain in their bark a bitter principle called salicin. This seemed to be exactly what was wanted; it was, therefore, tried in the treatment of rheumatic fever. The result exceeded all expectation. It was found that, given in large and frequent doses, salicin cured rheumatic fever as certainly and as rapidly as quinine cures ague." There is a nexus, which we may not altogether grasp, between the ratiocination of the modern medical practitioner and that of the uneducated peasant, who is cured of his ague by breathing it into a hollow willow tree.





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## Editorial Articles

### That Pharmacy Inquiry

THREE years have passed since an inter-departmental inquiry was instituted into the poison laws of this country, and incidentally the practice of pharmacy. That inquiry had some of its origin in the mishandling by a department of arsenic distribution by untrained people. On August 14, 1926, there came into force a whittling down of restrictions on the sale of arsenical preparations to appease official wrath: the difference is shown in the following comparison of Part I of the Schedule so far as arsenic is affected by the Poisons and Pharmacy Act, 1908:—

March 3, 1925

Arsenic, and its preparations

August 14, 1926

Arsenic, and its preparations, except preparations for use exclusively in agriculture or horticulture for the destruction of insects, fungi or bacteria or as a sheep wash or sheep dip [Then follow the conditions]

We do not assume that the Pharmaceutical Society's Council was at fault in making the change of March 1925; it appeared politic to do so after the arsenical poisoning of a murder trial in which it was shown that weed-killer had been easily obtained. What happened as a consequence of this change was set out in our columns in 1926. Government departments do not see eye to eye with the requirements of the general public, but only with that section which can exert the greatest pressure. The Pharmaceutical Society's Council might reasonably be blamed for giving way so easily, but resistance to the request of departmental administrators is not a strong point in that quarter. It is as well to face facts squarely on the consequences of the present distribution of poisons. In the years 1926-28 thirty cases of death were certified as due to arsenic, either by negligence or suicide. If we examine other deaths we find during those years:—Poisons within Part I, 128 deaths; within Part II, 106 deaths; poisons on which regulations are doubtful or, such as they are, represent dual control, 1,635; potent drugs not classified as poisons, 349. To define the poison laws of Great Britain as chaotic is not quite true; but, to say the least, they are confusing. The inquiry into the poison laws was a natural outcome of this confusion. The Society's Council is authorised by law to administer the acts which affect two Schedules only; and though there is some ambiguity here and there in those schedules, they, for the most part, present no real difficulties. The licensing authorities for sales of agricultural and horti-



cultural purposes are local governing bodies; but these authorities have no power to deal with failure to comply with the regulations save withdrawal of licence, and their power of inspection is nebulous. These local authorities are supposed to take into consideration the conditions of supply of these poisons within the district, but it must be admitted that in most districts this right might just as well not exist. In any case, the burden is usually placed on the local chemists to prove adequate supplies, and competitive trade creeps in on most occasions. We have, in addition, "poisonous" substances; these are sold by anyone subject to conditions, while the police authorities administer the law. It is true that when information is brought to the Council of contravention they notify the specific authorities, which step usually leads to action; but is this the best way? The Pharmacy Act of 1868 thrust poison-law administration on the Pharmaceutical Society as represented by its Council. That they have administered the law well and fairly is, we believe, generally admitted by every government authority. The law is weak, and infringements are often continuous with no further penalty than a repetitive fine, and the cases seldom come into the courts. The whole position needs to be consolidated and made more effective. One authority only should administer the law. We are not under any necessity to specify what that authority should be; but there are only two ways—one a continuance of the present system, and the other an *ad hoc* authority. The first is only a partial success, and the latter is something new, creating fears or hopes dependent upon whether individuals have confidence in public administration or not. It follows that poison laws administered by (1) the Pharmaceutical Society, (2) the Home Office, and (3) a few hundreds of police authorities is not likely to make for harmony. The inter-departmental inquiry had something more than administration to consider, as the question of compilation of the poisons schedules was bound up with the administration, especially after the muddle made by the deletion of "vegetable" qualifying "alkaloids." The weakness of the present position is accentuated by a chartered society administering its own protection act, doing something it does not love but perforce must perform. This factor, if examined closely, must be admitted as the primary cause of the division of authority and the looseness in devising schedules for sales or dispensing of potent drugs. Whenever cases of poisoning arise, by accident or design, it is natural for one side or the other to recall incidents in sale, prescribing or dispensing which might have proved injurious but for some specified watchfulness. The State requires a person to be trained and examined before it allows him to sell some specified poisons, but requires no such provision for dispensing apart from sale, and, above all, lays down no proper conditions for the sale of other dangerous poisons. The law requires the chemist to be a duly registered person before it admits him as a supervisory authority in dispensing some prescriptions, but ignores the case of other prescriptions. The Army authorities are a little more logical in one respect, but more obtuse in another. And it has taken three years for an Inter-departmental Committee to hear evidence and try to make up its mind to a recommendation that the system providing for the dispensing of medicines in Great Britain is all wrong. Or, perhaps, we may be wrong in that: the Committee might be able to make up its mind that it is all wrong, but it is utterly unable to suggest a remedy. We trust we are not prejudging these experts on account of their dilatory conduct; in any case, the Committee should either forward its report to the proper authority or admit

its futility. It is clear, however, that the present conditions should not continue. No good case can be made out for any other body but an *ad hoc* authority dealing with the sale of poisons and potent drugs, with full control over any system of licensing which may be found necessary. It may be a wrench from the traditions of Number Seventeen Bloomsbury Square, but divested of this it will be free from a taint which in the opinion of the public is contrary to public policy. The advantage of the severance of administration of the law of poisons from a private body will pave the way for the rationalisation of the sale and dispensing of poisons. A public authority can do what no private body dare. We have seen many comments on private dispensing by men who prescribe, some wise and some foolish; but no Mussolinian power is likely to arise in these islands which will ever forbid such a procedure by law or by decree. It is an inalienable right of any old lady to dispense anything for anyone else foolish enough to swallow it providing that, if she wishes to dispense a poison or potent drug, she must have the ability and freedom to get it. That is where a public authority can step in and lay down the same conditions for medical as for pharmaceutical dispensing, for it should follow that no conditions are made without suitable and adequate inspection. Moreover, would it not be better for such a public authority to have full control over testing of medicines instead of the present conflicting methods of food and drugs activity linked with the scheme under the National Health Insurance? A so-called surgery or public institution where dispensing is done should be as open to inspection and application of the law as the shop of a chemist and druggist. If this were so, the protection of the public would be better safeguarded than it is at the present time. For quite two years we have possessed our souls in patience, awaiting the pronouncement of this inter-departmental inquiry. During this period it has apparently heard no more evidence, but spasmodically held meetings at which, it must be assumed, the members have agreed to differ and adjourn. Rumour has it that activity is again being shown. One thing is quite clear, that out of the recent exposure of the easy and foolish distribution of arsenical preparations, and the absence of any safeguard over a great volume of dispensed medicine in this country, the time is ripe for that Committee to come out of its secret recesses and either declare its incompetence or issue its report. Three things are possible for the welfare of the community, whose interests should be paramount:—(1) Simplification, consolidation, and administration of the poison laws by an adequate authority; (2) proper provision for inspection and control of all dispensed medicines, whether by pharmaceutical, institutional, or medical representatives; (3) the application of safeguards for purity and quality of the medicaments by whomsoever dispensed.

### Stability in Arsenic

CONSIDERING the very wide fluctuations which took place in the price of white arsenic over a long period, up to about the end of 1925 (when the highest point recorded was about £33 per ton, delivered London), the position after another decline of £6 per ton became somewhat stereotyped. The market in that year finally settled down at about £17 over a certain period, but temporarily weakened again, with sales effected down to as low as £13, delivered free on trucks at the mines, equivalent to £15 delivered at London railway station. Within the last two years, or since the position was referred to in our editorial of September 3, 1927 (p. 308), there has been but little to excite attention as to market prospects, owing to ample supplies. Variations in value have been



relatively small, and the price of white Cornish, indeed, in the course of this year has moved only slightly on either side of £16 5s., free on rail at the mines, the nearest figure now being £16. Production in the United States and other countries of late years has varied considerably, but has certainly been more than sufficient to keep pace with trade needs. The most striking feature in the past year has been the renewed heavy increase in the United States output, which, after steadily declining in the years 1925, 1926 and 1927 down to 10,515 short tons, was restored in 1928 to 14,163 short tons, as indicated by the Washington returns of the Department of Commerce. This amount is only slightly under the high record figures for 1923 and 1924. Considering that American imports of white arsenic for last year at 11,153 tons were not much under the figures for the previous year, which amounted to 12,517 tons, domestic needs have evidently been on an enlarged scale. Particulars from Washington state that insecticide manufacturers were the largest consumers of arsenic, utilising more than 60 per cent. of the total domestic supply; the use for weed-killer and wood-preserve mixtures also increased, about 25 per cent. of the total supply in 1928 being absorbed for these purposes, and 11 per cent. by the glass industry. The domestic output for 1928, which was nearly all secured as a by-product in connection with the smelting of copper and lead ores, added to imports of crude and refined arsenic already mentioned, made the total available supply of white arsenic for that year, 25,316 short tons. More than two-thirds of the American imports are now contributed by Mexico, where the output has also grown considerably during the last few years, while the balance is about equally drawn from Canada and Japan, although the latter country is also shipping moderate quantities to European countries. Details of the American imports for 1928 of white arsenic were as follows:—

	Short tons	\$
From Belgium .. ..	178	12,885
„ Germany .. ..	47	5,697
„ Canada .. ..	1,582	121,552
„ Japan .. ..	1,281	52,794
„ Mexico .. ..	8,037	581,024
„ British Malaya .. ..	28	1,217
Total .. ..	11,153	775,169

It will be seen that only little is being imported from European sources. At the current relatively low price ruling, the outlet is largely for the protection of cotton growers, and will probably be further stimulated, although this depends to some extent on weather conditions, or the development of the boll weevil. While the total world's production has now reached a new high record in the neighbourhood of 30,000 tons, it is interesting to note that American requirements are absorbing approximately 75 per cent. thereof, and are thus far greater than those of all other countries together. Moreover, American imports for the first half of this year have again been at an increased rate, amounting to 8,778 short tons, or about 1,200 tons in excess of the same period last year. Within the last ten years, there has been a very big increase in the manufacture of calcium arsenate, and this increase seems likely to continue. The total Canadian output of arsenic for 1927 was 2,780 long tons, this indicating an excess of 515 tons compared with the previous year, which is a new high record. The greater part of this output comes from the South Ontario smelters as a by-product in smelting silver-cobalt ores. The production in British Columbia is next in importance, being secured from the concentrates shipped from the Nickel Plate Gold mine to the Tacoma smelter, while a small amount is produced in Nova Scotia. During 1927 Canada imported 286,377 lb. of arsenious oxide, chiefly from the United States, but her takings of sulphide of arsenic from the latter country,

which were 63,829 lb. in 1926, fell to 16,245 lb. in 1927. The output of white arsenic in the United Kingdom, which is almost entirely secured in Cornwall as a by-product in the tin-mining area, has been about cut in half from what it was in 1925 at over 2,500 tons, due to the much reduced price, and is not likely to improve under present conditions, especially in view of the serious depression in the tin industry. Approximate price records for white Cornish arsenic, delivered London (outside of the war-period, when its value rose to as high as £150 a ton), are about as follows:—

Per ton		Highest	Lowest	Jan. 1
		£ s.	£ s.	£ s.
Pre-war years .. ..	..	12 0	9 0	—
1922-1923 .. ..	..	70 0	40 0	—
1924 .. ..	..	69 0	34 0	69 0
1925 .. ..	..	33 10	17 10	17 10
1926 .. ..	..	17 10	15 0	16 5
1927 .. ..	..	19 10	17 10	18 0
1928 .. ..	..	18 10	18 0	18 0

### Labelling of Malt Extracts

REFERENCE was made in our issue of November 9 (p. 545) to the provisions of the Agricultural Produce (Grading and Marking) Act, 1928, so far as it affects the labelling of malt extracts. A perusal of Draft Marketing Leaflet No. 14, issued by the Ministry of Agriculture and Fisheries, suggests that manufacturers of malt products, together with wholesalers and retailers who sell such goods, will need to make themselves acquainted with the system of "voluntary grading and marking" which has been introduced. Dealing first with grading, the leaflet points out a provision of the Act to the effect that, notwithstanding any contract or notice to the contrary, any product sold must conform in quality to the relevant statutory definition. No unauthorised person may mark any article, covering or label with a statutory grade designation mark. The Minister has appointed a National Mark Committee to authorise the marking, and a trade committee, consisting of growers, manufacturers and distributors, to advise the National Mark Committee. Authorised packers must accept as final the decision of the Malt Products Trade Committee as to whether a particular sample of barley or malt is home-grown. In the first instance, only manufacturers with a minimum output of 250 tons per annum and packers handling at least 20 tons a year of malt extract may use the national mark; conditions for guarantee of genuineness are also laid down. Malt extract of the "pharmaceutical" and "veterinary" grades may be mixed and sold in conjunction with cod-liver oil subject to the following conditions:—

(i) The words "All-English (Pharmaceutical) Malt Extract with Cod-Liver Oil," and/or "All-English (Veterinary) Malt Extract with Cod-Liver Oil," as the case may be, shall be clearly marked on the label or container.

(ii) The amount of cod-liver oil present shall in every case be 15 per cent. by volume of the total mixture. A variation of one per cent. of the total volume above or below this figure, as indicated by determinations made on samples drawn at the authorised packer's premises, shall, however, be allowed as a margin of error.

(iii) The cod-liver oil as sold in conjunction with pharmaceutical malt extract shall be prepared in the manner, and correspond to the standard, laid down in the British Pharmacopœia.

(iv) The oil as sold in conjunction with veterinary malt extract shall be genuine, palatable cod-liver oil from which the vitamins have not been removed.

Pharmaceutical malt extract (with or without cod-liver oil) must be sold in amber glass containers of 1-lb., 2-lb., 4-lb. or 7-lb. size, which must be oval except in the case of the 7-lb. jars; these may be round. Serially numbered official labels must be used and paid for: labels for pharmaceutical malt extracts will be mainly blue and those for veterinary kinds mainly yellow. Records must be kept; 1-lb. samples of each batch made are to be retained for at least a month; authorised packers must join a packers' association if and when required to do by the Ministry; and premises must be open to official inspection. These provisions, though at first sight rather reminiscent of the House that Jack built, have presumably been agreed to by the interests concerned.



## Everyday Problems in Pharmacy

Abstract of a Paper by J. H. Franklin, Ph.C., read at a Meeting of the Manchester Pharmaceutical Association on November 5.

It is safe to say that no calling offers so many interesting and sometimes perplexing difficulties as pharmacy, and I would strongly urge young members to make notes of any unusual happenings for examination and future discussion. They can be on almost any conceivable subject—travellers' peculiarities, unusual behaviour of orugs, dispensing difficulties, incompatibilities, Dangerous Drugs Acts problems, National Insurance Formulary, etc.

### OPHTHALMIC CAPSULES OF ATROPINE OINTMENT

An interesting problem arose in connection with these capsules, which, after keeping for about two years, were found to be almost inert. The ointment base was a highly purified white petroleum jelly containing 1 per cent. of atropine alkaloid. The capsules were of gelatin, and on examination it was found that the alkaloid had been absorbed by the gelatin and had passed from the petroleum jelly base. The problem has not been cleared up satisfactorily, but when we remember that the salts of atropine are very soluble (sulphate 2 in 1 of water) and that glyco-gelatin mass is always acid, it can easily be seen that a soluble salt may have been formed from this insoluble free alkaloid and diffused into the gelatin mass. This is closely allied to the "shaking out" of alkaloids in alkaloidal assays.

### LASSAR'S PASTE (B.P.C.)

The formula for pasta zinci co., B.P.C., has been incorporated into the N.I. Formulary. This is somewhat surprising, as economy is one of the principles of the compilers of the N.I.F.; as the Codex uses white petroleum jelly as a basis for the preparation, which is, of course, more expensive than the yellow variety, one fails to see where economy enters. Yellow petroleum jelly makes a nice pale lemon yellow ointment, and, further, the original Lassar's paste was prepared with yellow jelly.

### CANNABINE TANNATE

About six months since the Dangerous Drugs Department of the Home Office declared that cannabine tannate was to be treated as a "dangerous" drug. This ruling was resisted, and we now learn that the Home Secretary is prepared to treat cannabine tannate as not being a "dangerous" drug. Of course, it does not matter in the least if it is treated as a "dangerous" drug, for the simple reason that it is rarely used; but there is a principle at stake, and it appears to me to be almost ludicrous to try to bring cannabine tannate under the words of the Acts and Regulations, which read in Section 3, "Any extract or tincture of Indian hemp." Moreover, there is no knowledge that cannabine tannate produces the harmful effect of Indian hemp. This note is particularly appropriate, as the Government has just appointed a strong Commission to inquire into the "despotism" of government by Whitehall or permanent officials. [Cannabine tannate was declared to be outside the Acts and Regulations in one of our editorial articles on January 5, 1929.—EDITOR.]

### TINCTURE OF GINGER (B.P.)

I have just examined a tincture of ginger made from an extract of ginger (a kind of gingerin), the extract in all probability having been made with industrial methylated spirit. The flavour was very poor and not equal to a tincture made by percolation from the coarsest ginger, whilst the colour was dark brown instead of deep straw colour. In my opinion such a tincture is not a satisfactory galenical, which should be prepared as the Pharmacopœia directs, i.e., by percolating Jamaica ginger with alcohol 90 per cent.

### TINCTURE OF SQUILL (B.P.)

During the very cold weather of the early part of 1929 I saw a two-pint bottle of this tincture with about a quarter of an inch of solid jelly fixed to the bottom of

the bottle. I asked to have the bottle, and on examination it proved to be a clear, almost solid jelly that had separated out owing to the extreme weather. On loosening a little of it, it was noticed that it would slowly redissolve in the tincture if allowed to remain in a moderately warm room and gently shaken occasionally. The deposit was quite different to the deposit occasionally noticed in tinctures and other pharmaceutical preparations.

### METHYLATED LINIMENT OF SOAP

Some time since I was asked if there was any legal restriction on the sale of methylated liniment of soap by unqualified dealers. I found this somewhat hithering, and on inquiry in London it was pointed out "that in the Licensing (Consolidation) Act, 1910, the sale of medicinal spirits, or spirits made up in medicine sold by medicinal practitioners or by chemists and druggists, does not require a justice's licence. Theoretically, this means that unqualified dealers cannot lawfully sell such preparations, but, unfortunately, the Board of Customs and Excise have not, so far, taken any action to limit this provision." If there is no interference with unqualified traders selling medicines made with duty-paid alcohol, we are bound to take it that at present there is no legal restriction on the sale of the methylated liniment.

### COD-LIVER OIL

Recent important researches appear to show that the maximum dose of vitamins A and D is contained in from two to three drachms of cod-liver oil and that larger doses are unnecessary and uneconomical. It is important for pharmacists to know that a dessertspoonful contains the maximum dose of the A and D vitamins for an adult, and perhaps a half to one teaspoonful for a child, and, in addition, it would be a relief to some who have an objection to taking the oil. I believe that many of the difficulties of taking cod-liver oil are due to beginning with too large a dose. The Norwegian Government has passed a law prohibiting the exportation of cod-liver oil which has been adulterated with other and inferior fish-liver oils. The necessity for legislation of this nature proves that some of the cod-liver oil on the market may not be of a very high standard, and shows the importance of a vitamin test.

### NEW NATIONAL INSURANCE FORMULARY PREPARATIONS

I have been asked: "If a preparation in the N.I.F. is not satisfactory, is it right to improve it?" Example: lin. album, which is unsightly and separates very badly. My own opinion is that we should make the liniment exactly as written in the Formulary. If one pharmacist improves it and makes a nice white, perfectly elegant, inseparable liniment, and his neighbour sends it out exactly as prescribed in the Formulary, what is going to happen? Perhaps it is enough to say that I strongly adhere to the view that the preparations should be dispensed "as written," but I recognise that there will be other views. Although I have written about a few unsatisfactory preparations in the Formulary, this has simply been done to point out the imperfections and with a view to obtaining revision. The compilation has mainly been done by medical men, but I sympathise with the pharmacists who have had to bear the brunt of the attacks that have been made on the work. In my opinion it would be far better to accept the work and, after a few months' trial, have a new issue or a supplement of the improved formulas. In some towns the pharmacists have to work from several panel formularies, and the adoption of the National would, I feel certain, be a considerable gain.

### VITAMIN A

I pointed out last year that vitamin A was likely to be recognised as the anti-infectious vitamin. During this year it has been shown that seven women suffering from puerperal fever were treated with vitamin A and they all recovered. Of course, the cases are not enough to be anything like conclusive, but they show what may happen in the way of treatment in the future. From the above it has been suggested that if a child-bearing mother is not thriving, a dose of cod-liver oil three times daily would be helpful, if the patient could tolerate it.



## MACLEAN'S POWDER

In the early part of 1926 Professor MacLean published an account of what is known as the intensive alkaline treatment of gastric and duodenal ulcer. The treatment consists of keeping the stomach constantly alkaline by fairly big and frequent doses of alkalis. The alkaline compound used by Dr. MacLean for this purpose consists of bismuth carbonate, sodium bicarbonate, magnesium carbonate and calcium carbonate; and throughout the whole of the important paper no mention is made of the kind of chalk (precipitated or prepared) which should be used. Some eight or nine months since the question arose, "What kind of chalk should be dispensed?" Following the usual arguments and practice, I decided that it must be prepared chalk; but as there was some small doubt, Mr. J. H. Ridgway, of Manchester, wrote to the dispenser at St. Thomas's Hospital, London, who was kind enough to inform him that the prepared variety was always used in the hospital; and as the long trials of the treatment were carried out in the same hospital this appeared to be final. It now seems that some dispensers use the prepared chalk and some the precipitated at the present time. I do not suppose that there is much difference in the therapeutical action of the powder, whichever kind of chalk is used, but there is a considerable difference in the colour and density, the powder being lighter in colour and density when precipitated chalk is used. This variation in the density is important, as it makes a considerable difference in the dosage.

Although there was no doubt in my mind about the chalk, I felt that the only person who could settle the point with absolute certainty was Dr. MacLean himself, and consequently I wrote to him and asked him if he would be good enough to let me know which chalk he intended to be compounded in his powder; and I now have to thank him for his most courteous reply, in which he says: "It really does not matter, from the therapeutic point of view, which preparation of chalk is used, but at St. Thomas's Hospital we have always used the so-called 'creta preparata'. I think we might agree to use the 'creta preparata' in all these prescriptions." This settles the problem finally, and when MacLean's powder, or any modification of it, is prescribed, we are obliged to use what Professor MacLean intends, i.e., prepared chalk, unless, of course, the precipitated is ordered, and it is most important that we should all aim at uniformity in such an important and universally used medicine. I understand that in two recent issues of the "Script" it has been stated that precipitated chalk should be used in this preparation, but in face of the above it appears that this is incorrect.

## GOWER'S SOLUTION

I would draw the attention of pharmacists to an error in all but the most recent imprints of the B.P.C., 1923. On page 1518, in the formula given for Gower's hamacytometer solution, the distilled water should read 100, not 1,000.

## Friends of the Poor

WE are indebted to a correspondent (22/10) for a copy of "The Church Army Gazette" of October 19, in which the first article of a series entitled "The Poor and their Friends" is devoted to "The Chemist." The following excerpt gives an idea of the retailer as a sympathetic observer sees him:—

"A real, good, true friend of the poor is the Chemist—that wise and kindly and skilful man who spends his days in the shop with the lovely red and blue and golden bottles in the window. The very spotlessness of the Chemist's shop makes it precious in poor neighbourhoods. The lovely clean smell that pervades it, the fascinating glass jars with queer names on, the little drawers and scales, and shining bottles, and dainty packets of this, that, and the other thing. . . .

"Whether Tommy, or Annie, or the Baby (and babies seem to abound by the *billion* in our poor parts) has 'fell themselves,' or 'burnt, or scalded, or otherwise damaged themselves,' or Granny has a 'Bad Leg,' or Father a 'Churchyard Cough,' or Mother 'comes over

queer' or 'Faint-like,' or Teddy swallows a button, or any one of those thousand and one things happen that are always happening thick and fast in crowded neighbourhoods, the Chemist always knows what to do—always has the right thing. Blessed be the doctors amongst our poor, and the Chemist's shop is the valuable handmaid of the Doctor's surgery; but it is more than that, for the surgery is only open at certain times, the Doctor has other work to do, other sufferers to attend to; but the Chemist is a sort of 'Poor Man's Doctor,' and he is there behind his counter all day long, at hand for every need, every emergency. Indigestion, chilblains, toothache, colic, bad heads, bad feet, bad legs, bad backs, even bad babies—the Chemist has magic little bottles of healing for them all. And he isn't just a tradesman. Oh, no! Most decidedly not. He gives you counsel and comfort with your cough-drops and good advice with your acidity cure. He chats brightly about the bad weather while he wraps up your corn-cure; but to see him really glow and expand, go to him with an ailment that demands 'Our Own Preparation.' . . . In the lives of our poor folks the Chemist looms large—a Minister of Kindness and Healing—a Family Friend indeed."

## Oil of Peppermint

H. CARLES contributes an interesting paper on this essential oil to "La Parfumerie Moderne," September 1929, in which he claims to have discovered a new constituent. He points out that the normal characters of Italo-Mitcham oil of peppermint are as follows:—Specific gravity 0.906-0.912, optical rotation  $-24^{\circ}$  to  $-18^{\circ}$ , esters 3 to 6 per cent., menthol 47-53 per cent., and menthone 20-35 per cent. He has, however, had samples during 1927 with s.g. 0.913 to 0.915, and optical rotation  $-10^{\circ}$  to  $-14^{\circ}$ . Using an oil of optical rotation  $-10^{\circ}$  and specific gravity 0.915, he obtained a fraction distilling at  $70-75^{\circ}$  at 10 mm., and having s.g. 0.934, and optical rotation  $+35^{\circ}$ . This fraction contained menthone and a little menthol and menthyl acetate. By further fractionation and elimination of the ketone and the menthol, an oil was obtained having the following characters:—s.g. 0.965, optical rotation  $+81^{\circ}$ , refractive index 1.4807; b.p.  $196^{\circ}$  (this figure is accidentally reported as the "melting point" in an English version in the original paper). The characters of this body, except so far as its reactions are concerned, have not been determined, and its nature is not clear.

The following oils were examined and their characters are as follows:—

Herb cut	1 April 23	2 May 16	3 July 1	4 July 16
Specific gravity ..	0.9053	0.906	0.9047	0.905
Optical rotation ..	$-21^{\circ}$	$-26^{\circ}$	$-21^{\circ}$	$-23^{\circ}$
Acid No. ..	0.7	0.84	0.28	0.28
Ester No. ..	8.4	14.7	5.25	7.0
" (acetylated)	122.85	151.2	117.6	139.65
Esters per cent.	2.97	5.2	1.86	2.47
Free alcohols ..	35.1	42.89	33.34	41.06
Total alcohols ..	37.44	47.0	35.8	43.0
Ketones ..	37.4	35.7	37.4	35.7

Samples were also distilled from green flowers and the fully developed mauve flowers, which give the following results:—

	Green flowers	Mauve flowers
Specific gravity ..	0.9409	0.9364
Optical rotation ..	$+30^{\circ} 10'$	$+24^{\circ} 40'$
Refractive index ..	1.4755	1.4716
Acid No. ..	0.98	0.28
Esters per cent.	2.97	1.62
Free alcohols ..	14.82	27.3
Total alcohols ..	17.16	28.56
Ketones ..	25.4	—
absorbed by $\text{Na}_2\text{SO}_3$ per cent.	4.0	3.0

**NORTH-EAST COAST EXHIBITION.**—It is announced that there is a trading profit of £3,000 on the recent North-East Coast Exhibition at Newcastle-on-Tyne.



## "Total Solids" Criticised

Abstract of a Paper entitled "The 'Total Solids' of the Official Tinctures and their Limitations as Analytical Factors," read by J. R. Walsley, Ph.C., F.I.C., F.C.S., at a meeting of the Manchester Pharmaceutical Association, on November 5

By reason of their stability and elegance, no group of pharmaceutical preparations is so widely used as the official tinctures; and these comprise a varied assortment of spirituous solutions which may be either simple solutions of inorganic or organic substances of more or less definite chemical composition, whose concentration is determinable by relatively simple methods, or solutions of vegetable extractive of complex composition, the determination of which, except in the comparatively few cases where alkaloidal standardisation is carried out, is not readily accomplished. In the latter the proportion of extractive matter or "total solids" has come to be regarded as the criterion of the quality or as proof that the proper proportion of crude drug has been used in their preparation. Several works give figures which are intended as a guide to the analyst who is called upon to express his opinion of the genuineness or otherwise of a particular tincture; but, as the following notes show, the utility of these figures has strict limitations in this direction, and in some cases may lead to quite wrong conclusions. The same figure is copied from one book to another, so that in time it acquires a semi-official sanction. In other cases there is a wide variation, amounting to as much as 50 per cent. above or below the mean. In many cases it would appear that each worker had examined only a limited range of samples. As an example we may consider *tinctura aconiti*. The Irish Local Government Department fixes as a minimum 2 per cent. w/v for the "total solids" (4), which is the figure given by another authority (3), while Squire (1) and some other workers find it is "about 1 per cent. w/v." As recently as September 14 a correspondent in "The Pharmaceutical Journal" advocated that a standard for total solids should be given in the B.P. or B.P.C. As this particular tincture is standardised in terms of ether-soluble alkaloid, there is no need to trouble about the proportion of extractive, and the same applies to some other cases.

A number of tinctures contain glycerin, usually in the proportion of 10 per cent. by volume, as in the case of *tinctura cardamomi composita*; yet one finds that the total solids of this is often given as "about 13 per cent. w/v" (1), (3), (4), a figure that would be given by the solvent alone. Several tinctures are used as flavouring adjuncts, and owe their character to the essential oils or other odorous bodies extracted from the crude drug by the menstruum or to the addition of volatile oils. It is quite clear that the aroma in such can have very little relationship to the amount of solid matter. Science has not yet devised any method which enables us to assign a numerical value to the character of an odour or taste, or to its intensity. The only guide is, therefore, the organs of smell and taste. Two or three tinctures, including the one mentioned above, are used for their colour, but there are methods by which a numerical value can be assigned to a particular tint as well as to its intensity. These values are usually arbitrary and can only be referred to the instrument concerned, one of the various makes of tintometer.

*Tinctura Cardamomi Composita*, apart from the 10 per cent. by volume of glycerin, contains but a very small quantity of solids, actually about 0.9 per cent. This figure, however, is no guide to its flavour, and but little use as a measure of colour intensity. The colour of this preparation has been shown (5) to be influenced by small variations in acidity and by even the slightest metallic contamination; but it has never been satisfactory since the alcoholic strength was reduced, and the raisins were replaced by glycerin, in the present Pharmacopœia. There have been great variations in the colour of this tincture as sent out by wholesalers, with an equally great variation in the colour of dispensed medicine (6). Is the Pharmacopœia, then, the one uniform standard and guide that the preface tells us it is? Possibly the forthcoming Pharmacopœia will introduce a new and more satisfactory formula on lines that have been suggested (7), but it is clear that a colour standard should be included. Would it not be possible to say that the colour of the tincture is

not less than that of a solution prepared by mixing 2 volumes of 1-per-cent. solution of iron alum (in 1 per cent. sulphuric acid) with 2 volumes of 1-per-cent. (approximately N/10) solution of potassium thiocyanate and adding 1 volume of water? It will be found that the colour of such a solution very closely approximates to that of a normal sample of tinct. card. co. There is always the more exact method of the Lovibond tintometer, but such an instrument is not usually part of the equipment of the retail pharmacy.

*Tinctura Lavandulæ Composita* is really a coloured alcoholic solution of essential oils containing but an infinitesimal proportion of extractive matter. The solution proposed as a colour standard for comparison with tinct. card. co. would do equally well for this.

*Tinctura Zingiberis*, as previously pointed out (10), should contain about 0.4 per cent. w/v of total solids, and a higher figure than this is indicative, not of a greater proportion of ginger, but rather that an inferior grade of ginger had been used in its preparation. The inferior grades of ginger usually contain a greater proportion of non-volatile resin but less volatile oil. It may be remarked in passing that only the tincture from freshly-ground Jamaica ginger possesses the true aroma of ginger, and the only test of this is the nose.

*Tinctura Myrrhæ* contains the soluble matter of 20 gm. of myrrh in 100 mils; and as the official standard for myrrh is that not more than 70 per cent. is insoluble in 90-per-cent. alcohol, the tincture would contain at least 6 per cent. w/v of soluble matter. This soluble matter will include essential oil, moisture and resin; but the determination of the total solids takes into account only the resin, and totally disregards the essential oil which gives to myrrh its aromatic character. The following table gives the analysis of half a dozen samples typical of the myrrh met with in trade at the present time, arranged in order of the percentage of the insoluble matter:—

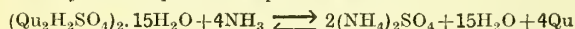
Described as	Selected	Opt.	Sorts	Powder	Sorts	Sorts
	%	%	%	%	%	%
Ash .. ..	3.92	2.44	8.02	8.14	6.78	7.55
Insoluble matter (gum) ..	51.56	54.14	54.20	56.06	61.78	66.08
Soluble non-volatile matter (resin) ..	41.00	30.56	37.68	35.44	30.80	20.40
Volatile matter ..	7.44	15.30	8.12	8.50	7.42	13.52
"Total solids" in tincture ..	8.20	6.11	7.54	7.09	6.16	4.08

Though only the first two meet the B.P. requirements as regards ash, all of them are within the limit for insoluble matter. It will be seen, however, that there is a great variation in the solids in the tinctures, and the proportion of these is not in direct ratio to the quality of the myrrh. The first sample was exceptionally good, the fourth was almost devoid of smell; yet from the analyst's standpoint they are almost equal. The average total solids from a large number of samples of tincture of myrrh has been found to be 5.57 per cent. w/v. Two authorities give 4.6 per cent. w/v (1) (2), another "not less than 5.5 per cent. w/v" (3), and one (4) a minimum of 4.5 per cent. w/v.

*Tinctura Benzoini Composita* was treated very fully in a paper read at last year's Conference (9), and this confirms the writer's opinion that the total solids, which have, by common consent, almost become an official standard of 17-18 per cent. w/v, are but one factor in determining the quality of the tincture. The volatile matter, to which its value as an inhalation is due, is by that standard quite neglected. Really good tinctures prepared from selected ingredients have been found to be so low in solids, on occasion, that an analyst accepting the above standard would take exception to them, while, on the other hand, tinctures rich in total solids have been found to be very deficient in volatile matter. A manufacturer can usually adjust his total solids to meet the requirements of public analysts with their minimum of 16.5 or 17 per cent. Another point to consider in regard to this tincture is when to stop the drying. A sample, which, after drying for a week at 100° C., gave 18.18 per cent. w/v, still continued to lose weight slowly, becoming 15.79 per cent. w/v after one month and 15 per cent. w/v after two months.



*Tinctura Quinina Ammoniata* is a solution containing the equivalent of 1.98 gm. of quinine sulphate and 0.95 gm. of ammonia ( $\text{NH}_3$ ) in 100 c.c.; but, as interaction takes place, the ammonia exists partly as sulphate and the quinine wholly as the free alkaloid. On evaporation the reverse change takes place, and a residue of dehydrated quinine sulphate is left:—



The various authorities (1) (2) (3) state that the total solids of this tincture are about 1.8 per cent. w/v, which is, of course, approximately correct, but is no guarantee that the whole of this residue is quinine sulphate. The quinine may be wholly removed by "shaking out" the tincture with chloroform, which on evaporation leaves a residue of anhydrous quinine; this may be weighed and its sulphate equivalent determined. The total ammonia may be determined by adding a measured volume of standard acid to a measured volume of tincture and titrating the excess of acid with standard alkali, using methyl red indicator. It is suggested that some such tests as these should have a place in the next Pharmacopœia. Recent reports show that even public analysts are a little uncertain of the proportion of ammonia that should be present.

*Tinctura Iodi Mitis* and *Fortis* are solutions of iodine and potassium iodide in alcohol; and to judge from legal reports in the trade Press some makers do not appear to regard the iodide as of any importance, and look upon it simply as an aid to solution. We can hardly say that it has no therapeutical effect when applied locally, when there are both a liniment and ointment of it in the B.P. The non-volatile solids here have a significance. It is suggested that this or a similar test would be useful following the titration of the iodine:—"When 10 millilitres (or 5 millilitres in the case of the strong tincture) are diluted with 100 millilitres of water and boiled until colourless, afterwards neutralising with  $N/10$  NaOH solution, not less than 14.9 millilitres, or more than 15.3 millilitres of  $N/10$  silver nitrate solution is required for complete precipitation (or from 17.9 to 18.4 millilitres in the case of the 5 millilitres of the strong tincture)." A small quantity of hydriodic acid is always formed from the iodine (14), so that the reading for the NaOH may be subtracted from that of the  $\text{AgNO}_3$  before calculation, if an exact percentage is required; it is too small, however, to effect the result materially.

*Tinctura Ferri Perchloridi*.—It has been said (11) that the B.P. makes a misstatement when it describes the test on the strong solution from which this is prepared. The test in the B.P. is quite in order, for it shows the presence of 19.86 per cent. of Fe in the 20 per cent. of iron used, that is, the wrought iron of the B.P. is allowed to contain 99.3 per cent. of Fe, which is quite a reasonable figure. This supposed error is occasionally (12) rediscovered. The tincture, therefore, should yield 7.1 per cent. w/v of  $\text{Fe}_2\text{O}_3$ .

*Tinctura Digitalis* has been the subject of many communications, and great strides have been made with its biological standardisation, yet we are to follow the official directions and prepare a 1 in 10 tincture which the analyst must judge by its containing 3.4 per cent. w/v of total solids regardless of its physiological activity. Failure to comply with the formula of the B.P. is a transgression of Section XV of the Pharmacy Act, and renders the person concerned liable to a penalty. It is hoped that the next B.P. will include the biological standardisation of this and other similar galenicals.

*Tinctura Scillæ* contains a considerable quantity of extractive matter, about 13 per cent. w/v, and this figure remains fairly constant. It has also a well-marked optical rotation about  $[\alpha]_{\text{D}}^{15} = -3.5^\circ$ . The optical rotation closely follows the total solids, but on biological test in the Society's Laboratory some samples whose solids and rotation were not above the average were found to be much above the average in activity. One cannot look for exact agreement in these matters on account of the range of error in biological tests, but there is sufficient evidence to show that total solids are not a measure of activity. It is interesting to note that on

inversion by boiling with dilute hydrochloric acid the reading is doubled, that is, it becomes  $[\alpha]_{\text{D}}^{15} = -7^\circ$ . In acetum scillæ the change takes place automatically, being promoted by the acetic acid present.

*Tinctura Ergotæ Ammoniata* never had much reputation, but it certainly has little now, and along with the liquid extract, in its present form, will not remain in the Pharmacopœia. It is clear that there is no relationship between total solids and the physiological activity of these preparations. We may have been amused by the story of one of the earliest users of tea, throwing away the beverage, trying to eat the infused leaves, and wondering why it was so esteemed; but pharmacy has done the same with ergot for years, and, following the B.P. and other Pharmacopœias, must still do it.

In the alkaloidal tinctures and liquid extracts it has been proved many times that extraction of the active principle proceeds at a different rate from the extraction of other bodies. A notable example is in the case of belladonna root (13).

#### SUMMARY

In the absence of alkaloidal standardisation the quality of the official tinctures has been judged by the proportion of extractive matter or total solids, but this has failed to take into account the volatile matter on which the quality and character of so many tinctures depend. The aroma is an important factor to which no analytical data can be given, and is thus neglected. A method of producing a standard colour for comparison of certain tinctures is suggested. There should be official tests for the quinine and ammonia in tinct. quin. ammon. and for the potassium iodide in the tinctures of iodine. Extractive matter has little or no connection with physiological tests, which alone should be the basis of standardisation.

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- (3) Moore and Partridge, Aids to Analysis, 1918.
- (4) Local Government Dept. (I.F.S.), Revised Standards for Pharmaceutical Preparations, 1923.
- (5) Bennett and Middleton, Year-Book of Pharm., 1926, p. 355.
- (6) Franklin, THE CHEMIST AND DRUGGIST, January 5, 1929.
- (7) Franklin and Greenhalgh, Year-Book of Pharm., 1923, p. 656.
- (8) Cocking, Quart. Journ. of Pharm., 1926, p. 337.
- (9) Wahnsley, Year-Book of Pharm., 1927, p. 509.
- (10) Liverseege, Year-Book of Pharm., 1924, p. 756.
- (11) Perrin, Pharm. Journ., March 31, 1923, p. 294.
- (12) Franklin, Pharm. Journ. [4], 64, 471.
- (13) Quart. Journ. Pharm., 1929, p. 142.

## Sporting Events

THE Ipswich Chemists' Hockey Club played their second match of the season under bad weather conditions on November 6, when they met a team representing the staff of Mr. G. W. Hales, F.S.M.C., chemist and druggist, Ipswich. The result was a win for the chemists by seven goals to one.

THE B.D.H. Sports Association Football Club, in a London Commercial League match on November 2, played at the Avenue, Highams Park, beat Black Eagle F.C. by 4 goals to 1. On the same day, in a North Middlesex league match, played on the B.D.H. Sports Ground, the B.D.H. F.C. beat Hickman's F.C. by 3 goals to 2. The B.D.H. Netball Club beat the Welcome Netball Club by 22 goals to 19.

THE B.D.H. Sports Association Football Club on November 9 met Kearley & Tonge F.C. in a London Commercial League match on the latter's ground at Wanstead. The game resulted in a win for the B.D.H. F.C. by 6 goals to 1. On the same day, on the B.D.H. Sports Ground, in a North Middlesex League match against the Eclipse F.C., the B.D.H. were beaten by 2 goals to 1. Playing at Highgate against Gibaud & Higley in a netball match, the B.D.H. N.C. beat G. & H. N.C. by 22 goals to 19.



## Associations' Winter Session

**Edinburgh.**—The annual general meeting of the Edinburgh and District Chemists' Trade Association was held at 36 York Place, on November 1, Mr. George Hall (president) in the chair. Mr. James Adamson, secretary, submitted the annual report of the Association. Mr. George Hedderwick, treasurer, submitted the financial statement, showing a balance of £45 7s. The following were elected office-bearers for the ensuing session:—*President*, George Hall; *Vice-President*, Archibald Currie; *Secretary*, James Adamson, 18 St. Mary Street; *Treasurer*, George Hedderwick, 54 Blackfriars Street; and *Committee*, Messrs. Chalmers, Girdwood, Muir, Reid, Tainsh and Wilson. It was agreed to hold the annual Burns' dinner on Wednesday, January 22, and the secretary intimated that Sir Joseph Dobbie had accepted the Association's invitation to propose "The immortal Memory." Arising out of the secretary's annual report a general discussion took place on the affairs of the Association.

**Edinburgh.**—The opening meeting of the fifty-second session of the Edinburgh Chemists', Assistants' and Apprentices' Association was held at 36 York Place, Edinburgh, on November 6, Miss I. A. Purdie, Ph.C. (vice-president), in the chair. Mr. Thomas Strachan was appointed secretary to succeed Mr. Colin Gunn, Ph.C., now of Leicester Technical College. The vice-president referred to the death of Mr. William Duncan, late principal of the Royal Dispensary School of Pharmacy, who had filled the office of president of the Association, and had taken a very active interest in the work for many years. It was agreed that a letter of sympathy should be sent to Mrs. Duncan. The secretary submitted the report on the botany excursions. The cordial thanks of the Association were due to Mr. Eric Knott, Ph.C., Mr. Colin Gunn, Ph.C., Miss I. A. Purdie, Ph.C., Mr. J. J. Blackie, Ph.C., and Mr. Rutherford Hill, Ph.C., who had conducted the excursions and an indoor demonstration. The Association were also indebted to Viscount Novar for permission to botanise in the grounds of the Raith Estate, and to Duncan, Flockhart & Co., for permission to visit their herb garden at Inverleith. The secretary submitted the report of the Prize Committee. Dr. George Coull, Ph.C., member of the Executive of the North British Branch, and the first prizeman of the Association, said he joined the Association in the second year of its existence, and he esteemed it an honour to be called upon to present the prizes on this occasion. The prizes were then presented, as follows:—The Cumming prize in Practical Pharmacy, First Prize, William J. Black (pupil of James Walker, Annan), "Squire's Companion to the B.P."; Second Prize, Renwick C. McGregor (pupil of Boots Cash Chemists, Edinburgh), "The Art of Dispensing" and "Forensic Pharmacy." The Dey Prize in Chemistry and Physics, James Ferguson (pupil of Alexander Spence, Edinburgh) "British Pharmacopœia," 1914, and "Chamber's Twentieth Century Dictionary." Duncan Botanical Prize, Ronald Gourlay (pupil of Alloa Co-operative Society, Ltd., Alloa), "British Pharmacopœia," 1914, "Candy's Physics," and Michael Arlen's "Mayfair." On the motion of the vice-president, a cordial vote of thanks was awarded to Dr. Coull and the donors of the prizes. The chairman then called upon Mr. J. J. Blackie, Ph.C., F.C.S., president of the Association, to give his opening address on *The Manufacturing Side of Pharmacy*. The address was fully illustrated by lantern slides of the apparatus described. Mr. Blackie said the pharmaceutical manufacturing laboratory was usually divided into several departments, which he proceeded to describe. Improvement in existing methods of manufacture and in the formulas of many of the preparations, where that was permissible, were continually being made. Difficulties arose in the manufacture of preparations on a large scale, and these required investigation. Mr. Blackie said he was indebted to Thompson & Capper, Ltd., Liverpool, for the loan of some of the slides, and also to the Arthur Colton Co. and Carter, Ltd., for permission to use the half-tone illustrations of some of their machines. On the motion of Mr. John Gilmour, Ph.C., seconded by Mr. Henry Stout, Ph.C., a vote of thanks was awarded to Mr.

Blackie, and on the motion of Mr. Blackie a vote of thanks was awarded to Mr. Hugh Skinner, who manipulated the lantern.

**London (N.E.).**—A meeting of the North-East London Pharmaceutical Association was held on October 31, Mr. T. E. Cushing in the chair. After the usual routine business an exceptionally able and illuminating address on the *Present Position of the P.A.T.A.* was given by Mr. H. E. Chapman, the general secretary, followed by a usefully critical discussion. A resolution was passed "That this Association desires to place on record its profound appreciation of the magnificent work accomplished by the P.A.T.A. during the past thirty-three years, and to express a hope that the special Committee appointed recently to consider the present position will evolve a method of dealing successfully with all infractions of its rules."

**London, (S.W.).**—The second general meeting of the session of the South-West London Chemists' Association and Branch of the Pharmaceutical Society, was held on November 1, Miss A. T. Borrowman in the chair. A large number of members were present. Mr. J. A. Kenningham, organising secretary of the P.A.T.A., gave an account of the recent work of his Association. He assured his audience that the P.A.T.A. were doing all in their power to trace the offenders in the three sections, and he hoped that within a short time he would be able to say that their supplies had been stopped. The meeting closed with a vote of thanks to the speaker.

**Manchester.**—A joint meeting of the Manchester Pharmaceutical Association and local Branch of the Pharmaceutical Society was held on November 5, Mr. W. I. Scholes in the chair. Introducing Mr. J. R. Walmsley, F.I.C., Ph.C., to give his paper on *The Total Solids of Some Official Tinctures and their Limitations as Analytical Factors* (see p. 591), he said Mr. Walmsley had devoted considerable time to research, and in his paper would give them the result of his investigations. In the discussion which followed the chairman said that mixtures containing tinct. card. co. differed enormously in colour if made with hard or soft water. Mr. Shaw said that in his experience the "total solids" of tincture of digitalis was a fair indication of its physiological activity. A paper was then read by Mr. Franklin on *Everyday Problems in Pharmacy* (see p. 589). A discussion followed in which many of the members took part. In his reply, Mr. Franklin said that the formula for Maclean's powder could be varied according to the requirements of the patient. Ung. methyl. salicyl., B.P.C., was one of the most effective preparations of methyl salicylate. He hoped that the unsightly preparations in the National Health Insurance Formulary would soon be replaced by more satisfactory formulas. A cordial vote of thanks to Messrs. Walmsley and Franklin, proposed by Mr. D. Dickson and seconded by Mr. H. Brindle, B.Sc., was carried with acclamation.

**Perth.**—At a meeting of the Perthshire Pharmacists' Association, held recently, Mr. J. B. MacDonald was unanimously elected a representative on the Burgh Pharmaceutical Committee; Mr. A. Kaye a member of the Burgh Pharmaceutical Subcommittee; and Mr. W. Watts, Crieff, a member of the County Pharmaceutical Committee.

## Festivities

### Birkenhead Whist Drive and Dance

THE annual whist drive and dance of the Birkenhead and Wirral Pharmacists' Association was held on October 31 at the Masonic Temple, Clifton Road. Whist occupied the initial portion of the evening, to be followed after the refreshments by dancing. At the conclusion of the whist drive the prizes were presented by Mrs. C. H. Wright (wife of the president), to the following:—*Ladies*: (1) Miss Megan Thomas, (2) Mrs. Stanbridge, (3) Miss Joyce Hughes (cut with Mrs. Burgess and Mrs. Crossley Jones); *Gents*: (1) Mr. Dulson, (2) Mrs. McLeod (playing gentleman); (3) Mr. Gordon.



## Insurance Act Dispensing

Record of matters concerning Chemists' interests in the National Health Insurance Acts

### Local Reports

#### ENGLAND AND WALES

**Blackburn.**—The Panel Committee of the Blackburn Insurance Committee reported, at a recent meeting, that they had no objection to the National Formulary, provided it was generally accepted by Lancashire committees. Dr. Greeves said the local pharmacopœia in operation in Blackburn had worked satisfactorily. His committee had no desire to change unless some advantage would be secured for all concerned. Mr. W. H. Lightbown, pharmacist, said every consideration should be given to the question before anything definite was done. He was afraid, if the National Formulary were adopted, practitioners would still prescribe from the old local pharmacopœia for a long time to come. He would rather see the Formulary before expressing a definite opinion on behalf of chemists. Dr. Aitken said it would be preferable for doctors and chemists to meet in conference and discuss the whole question. The matter was referred to the Panel and Pharmaceutical Committees.

**Cornwall.**—At a meeting of the Cornwall Insurance Committee, held recently, the Pharmaceutical Service Subcommittee discussed the action to be taken in four cases in connection with the testing scheme. In one (29.7 per cent. excess of zinc sulphate) it was felt that the case would be met by the chemist's attention being called to the absolute necessity of accurate dispensing, and in another it was recommended that a fine of £2 2s. should be imposed. In the case of deficiency the chemist's explanation was accepted. A fourth was one in which the chemist on being informed by the committee's agent that the sample of drops was for a test removed the cork from the bottle and poured the contents on the floor. The agent stated that the chemist said he had used ordinary water instead of distilled, but offered to make up the prescription again. This the agent refused, and the chemist then offered to make up the prescription again in exactly the same manner as before, using ordinary water. This offer was also refused. The chemist wrote that he now realised his action was a very foolish one, but that it was done on the spur of the moment. He expressed his regret and undertook that it should not occur again. The Committee decided to censure the chemist. Mr. Vivian said he understood that at some watering places during the summer months chemists' assistants were unduly rushed. The chairman replied that they had no evidence of such complaint as Mr. Vivian referred to. Mr. Webster referred to the fourth case, and moved that it should go back for reconsideration. Mr. Tripp thought the chemist ought to be fined. When a chemist got into a temper, broke a bottle and spilled the medicine, it looked very bad, and as if there was something he did not want to come to light. Mr. Tregenza said three chemists were present at the inquiry, and chemists and doctors were very severe on their fellows when they were in the wrong. If there was any fault they would have dealt with it. Mr. Williams pointed out that the chemist had acknowledged his wrong. Dr. Leslie said it was not a very terrible matter after all, for in this particular case the use of tap water instead of distilled water would not have been dangerous or inimical to the patient. But it was the general principle that mattered, and medical men depended on chemists dispensing correctly. Undoubtedly the chemist lost his head and did a foolish thing, but it was difficult to support the contention for a fine. This amendment was lost and the report was adopted.

**Denbighshire.**—At the recent quarterly meeting of the Insurance Committee held at Wrexham, the Clerk reported that during the quarter ended September 30, six samples of medicaments had been obtained from chemists. The dispensing of one sample was found to be unsatisfactory. A resolution from the Pharmaceutical Committee relating to certain alterations in the drug tariff was considered,

and it was decided to forward a copy of the resolution to the Welsh Board of Health. Accounts amounting to £7,958 13s. 10d. were passed. Mr. J. M. Edwards (chairman) said that the average cost of drugs and appliances per insured person for Wales, as a whole, in the year 1928 was 2s. 6½d., and for Denbighshire it was 2s. 11½d. The number of prescriptions issued in the county during the year was 176,793, and the cost £5,861 7s. 4d.

**Derbyshire.**—From the annual report of the County Insurance Committee it appears that the number of prescriptions, excluding those for test purposes, dealt with during the year ended October 31 was 708,157, an increase of 71,776 compared with the previous year. The expenditure on the chemists' fund was £23,560, made up of £10,037 for appliances and drugs, and £13,523 for dispensing fees. Of the total, £1,605 was for extra dispensing fees, representing 4.15 per cent. bonus on the fees for 1928. There were 161 chemists, with 204 shops, under agreement with the Committee. The testing of drugs and appliances was systematically continued, fifty-nine samples of medicines being dealt with by the analyst and fourteen samples of dressings submitted for examination at the Manchester testing house. In a general way a satisfactory pharmaceutical service was provided. In two cases small fines were imposed, in six the chemists were warned to exercise greater care in dispensing, and one chemist was requested to discontinue Insurance service. Mr. H. G. Toy, chemist and druggist, Derby, has been appointed a member of the Insurance Committee.

**London.**—The monthly meeting of the London Insurance Committee was held recently. The Finance Subcommittee recommended the payment of sums amounting to £220,747 15s. 4d. Among those were the following:—practitioners' drug fund, £41 7s. 2d.; chemists' fund, £19,318 12s. 6d. The accounts were passed. The Medical Benefit Subcommittee reported that during the second quarter of the current year 3,862 prescriptions for insulin were dispensed to 1,416 persons at a total cost of £1,370 14s. 6d. During the same period seventy hypodermic syringes for the self-administration of insulin were supplied to sixty-nine insured persons at a cost of £10 14s. 4d. The number of prescriptions for Fehling's solution dispensed was thirty-three. Prescriptions for vaccines and serums during the same period numbered 2,322; the number of patients was 2,210; and the total cost £211 14s. 6d. The Medical Benefit Subcommittee presented the following statistics in reference to prescriptions dispensed by chemists during the seven months of January to July (inclusive), with comparative figures for the same period in 1928:—

	1928	1929
Total No. of prescriptions	5,061,978	5,659,419
Cost of dispensing fees ..	£93,573 14s. 11d.	£106,024 18s. 5d.
Cost of ingredients ..	£77,087 10s. 11d.	£82,269 2s. 8d.
Av. cost of ingredients ..	3.65d.	3.49d.
Av. dispensing fees..	4.44d.	4.50d.
Total No. of persons on list	1,816,512	1,839,123

**Nottingham.**—At a meeting of the County Insurance Committee, held recently, statistics were presented by the Pharmaceutical Service Subcommittee. Seventeen samples of medicine had been obtained from chemists, and in only one case had any inaccuracy been disclosed. In this instance the inaccuracy was slight, and the chemist was requested to exercise more care in future. Prescriptions issued last year totalled 471,301, an increase of 219,604 compared with ten years ago. The number of tests of drugs and appliances taken from 1925 to October 1929 was 166, and of this total 89 per cent. were found satisfactory.

**Surrey.**—At a recent meeting of the Surrey Insurance Committee, the Pharmaceutical Service Subcommittee reported having received several complaints about chemists. In three cases the view of the Subcommittee that medicines had been carelessly dispensed was confirmed.

**Sussex (W.).**—At a recent meeting of the West Sussex Insurance Committee, the report of the Joint Services Subcommittee contained a reference to ordering hypodermic needles for the administration of insulin, and their supply by a chemist. Owing to the price allowed for



such needles, one English one had been ordered in the place of two foreign ones. Dr. Milbank-Smith considered that no thoroughly reliable needle could be obtained under 5d. The Committee decided to approve of representation being made to the Minister.

### Annual Panel Conference

The following resolution was carried unanimously at the annual Conference of Medical and Panel Committees representatives held in London on October 24:—"That the Conference supports the Council of the British Medical Association in its efforts to obtain amendment of Section 3 of the 1925 Dangerous Drugs Act, and recommends that heroin and its salts should come under the same conditions as morphine and its salts; also that the Council should on all possible occasions urge the Government not to enter into international conventions involving medical questions until the opinion of the medical profession has been ascertained."

### General Council of Panel Chemists (Scotland)

A meeting of the General Council of Panel Chemists (Scotland) was held at 36 York Place, Edinburgh, on October 30. Mr. John B. McVittae, Glasgow, was elected chairman and Mr. Frederick W. M. Bennett, Arbroath, vice-chairman. The financial statement for the year, duly audited and showing a favourable balance, was submitted and approved. It was reported that the consolidated regulations came into operation on May 1, the chief points affecting pharmaceutical service being (a) that drugs should include chemical reagents, such as Fehling's solution prescribed for insured persons instructed for self-treatment; (b) that minor alterations in terms of service during the year should not require to be intimated to individual panel chemists, but that if intimated to and agreed upon by the Pharmaceutical Standing Committee (Scotland) this should be sufficient; (c) that panel chemists are prohibited from giving a bonus or in any other way holding out inducements to insured persons to bring their prescriptions to a particular pharmacy; (d) that persons removed after inquiry from the list of panel chemists should not be employable as dispensers by panel chemists without the consent of the Department of Health. The new regulations for Panel and Pharmaceutical Committees were submitted. These indicated that the present arrangement would continue till May 31, 1932, and that thereafter committees would be re-elected for three years.

*Suggested Details regarding Appliances.*—In consequence of points which had emerged during the carrying out of the drug-testing scheme, it was proposed to include fuller details as to standards, sealed packets, bandages, ambiguous quantities, weights, equivalencies, etc., and also to insert after "adhesive plaster (spread on holland)" the following:—"This quality must be supplied when the term 'adhesive plaster' or 'emp. adhesiv.' is used in a prescription without qualification," and that the words "each to be supplied in a box" should be inserted under eyedroppers. The Clydebank Burgh and Ayr Burgh Pharmaceutical Committees submitted reasons why the proposal to insist that appliances must be handed out in original sealed packages as received should not be accepted. In the discussion it was pointed out that in some cases, e.g., carbolic gauze and iodoform gauze, there might be deterioration in the contents of the sealed package on keeping, and the chemist had no means of assuring himself that the material remained up to standard. In the case also of other appliances, such, for example, as lints or wools, the chemist had no control and no means of checking the quality of the contents of the sealed package. If this condition was imposed there ought to be some provision by which the person really responsible for the quality and quantity in the sealed package should bear the blame, and that it should not come upon the panel chemist. The Department of Health had stated that the chemist could always have his remedy against the wholesaler or manufacturer, but that was not so. The mere fact that a panel chemist was reported to an Insurance Committee as supplying an article not up to stan-

dard was a very serious matter for the panel chemist. He had no means of protecting himself against such a charge if he was compelled to supply the appliances to insured persons just as he received them from the wholesaler. A wholesaler's sealed packet containing an appliance might be said to be in the same position as a proprietary medicine, and, under the Sale of Food and Drugs (Adulteration) Act, 1928, no offence is committed where the article demanded is a proprietary medicine.

*Pharmaceutical Service for 1930.*—Letters were submitted suggesting a reconsideration and increase in dispensing fees. There was also submitted a letter with regard to cod-liver oil emulsion, B.P.C. This emulsion, containing 50 per cent. of cod-liver oil, was considered too fatty. It did not keep well. The usual emulsion of cod-liver oil contained 33 per cent. of oil, and was a more palatable preparation and not so apt to disagree. There was also submitted a letter stating that although the Department of Health had approved in some cases of the addition of a pharmacist to the Administrative Subcommittee for the drug testing scheme, in other instances the local Insurance Committee had refused to grant an application for the addition of a pharmacist. It was stated that while the Department sanctioned the addition of a pharmacist to the Administrative Subcommittee for deciding as to prescriptions to be used in applying the test, the pharmacist was not permitted to have anything to do with the report of the inspectors after the test had been applied. After discussion it was remitted to the Pharmaceutical Standing Committee (Scotland) with powers to confer with the Department of Health and adjust terms for pharmaceutical service for 1930.

*Industrial Spirit in N.H.I. Prescriptions.*—It was reported that the Commissioners of Customs and Excise had agreed to the proposal that industrial spirit might be used in the dispensing of medicinal preparations for external use, and that a preparation such as a menthol inhalation would be treated as coming within the category of a preparation for external use.

*Rebate on Absolute Alcohol or Rectified Spirit.*—It was reported that the Commissioners of Customs and Excise had agreed to grant rebate on alcohol prescribed for medicinal use. There had been attached to the communication, however, a statement which was entirely new and not in accordance with either the practice or understanding in Scottish pharmacy as to the supplying by prescription of rectified spirit in the ordinary course of medical treatment. The understanding had been quite clear that the concession about selling five ounces of rectified spirit at one time to a doctor or a scientist meant selling it, not by prescription, but in the ordinary way of retail sale and only to medical or scientific gentlemen. It was the unanimous opinion of the General Council that the concession had never been regarded as applying in any way whatsoever to the dispensing of prescriptions. The matter was still under consideration with the Department.

*N.H.I. Formulary.*—It was reported that among delegates attending the conference of the Scottish Association of Insurance Committees the introduction of the N.H.I. Formulary for England and Wales had been discussed. The general opinion appeared to be strongly against the introduction of any such formulary in Scotland, where hitherto the practice of a careful individual diagnosis and the prescribing of the appropriate medicines indicated was the recognised medical practice. The possible confusion also created by the inclusion of formulas with the same name as the recognised formulas of the B.P.C. had already in a few cases been realised. Anything in the nature of a practice under which the patient was adapted to the medicine rather than the medicine adapted to the patient was strongly to be deprecated. There was also a strong expression of opinion against the adoption of any system which might seem to suggest one form of treatment for insured persons and another form of treatment in private practice. The feeling was that any form of practice which suggested what was commonly known as "stock mixture" treatment was bad for the medical profession and the pharmaceutical profession, and, particularly, for insured persons.



## Trade Report

The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers receive the goods into stock, after which much expense may be incurred in garbing, packing, etc. Qualities of chemicals, drugs, essential and fixed oils, and many other commodities vary greatly, and higher prices than those here quoted are charged for selected qualities of natural products even in bulk quantities.

42 Cannon Street, E.C.4, November 14

INDUSTRIAL uncertainties in the United States have, unfortunately, tended to compromise trade prospects on this side and on the Continent. This has affected certain produce in the Mining Lane markets, particularly plantation rubber, which has declined to new low records for the year. Shellac is rather lower again, and pepper is easier. Sugar has shown little change, being about steady. Mercury has been fully sustained on continued buying. In crude drugs there are few changes. Belgian chamomiles are becoming scarcer and dearer. Norwegian cod-liver oil is in more demand and prices have advanced. Kordofan acacias are cheaper for new crop for shipment owing to the operations of "bear" speculators. Opium is firmer at the sources of production, but spot prices are unchanged. Among the aromatic seeds, Morocco cumin, coriander and fennel are easier to arrive. Business in pharmaceutical chemicals continues on restricted lines, the general tone being steady, with an absence of price fluctuations. Barbitone is firm and well maintained; citric acid is weak. Phenyl ethyl barbituric acid has been advanced. Among the industrial chemicals no important price changes are recorded, business continuing limited. Arsenic and potassium carbonate are in more inquiry. Business in so-called vegetable oils has been poor, and a number of products have declined. These include American turpentine and linseed oil. Ground nut, palm, Hankow wood, rape and soya have all weakened. Castor, coconut and cotton are quiet.

Higher	Easier	Lower
Chamomiles Cod-liver oil (Norw.) Phenyl ethylbarbituric acid and soda	Acid oils Coriander seed (c.i.f.) Cumin seed (c.i.f.) Fennel seed Ground nut oil Naphthas (solvent) Palm oil Pimento Rape oil Soya oil Wood oil	Citrus oils Gum acacia Linseed oil Pepper Rubber Shellac Turpentine

### Crude Drugs, etc.

AGAR AGAR.—Spot parcels of Kobe No. 1 are quoted at 3s. 11d., and Yokohama No. 1 at 3s. 8d. to 3s. 9d. per lb.

ANTIMONY.—The demand for Chinese regulus is chiefly confined to small lots on the spot and the tone is fairly steady, with the current quotation at around £31 10s., although business was reported at a little more. Terms for shipment stand at £29 10s. c.i.f. English refined high-grade is £52 to £52 10s., and good brands vary from about £49 down to £45. Only a retail business is being done, chiefly for export. Chinese crude is nominally £26 10s. per ton and Chinese white oxide is £35 to £35 10s.

ARNICA FLOWERS are offered at 1s. 4d. per lb. c.i.f.

CADMIUM.—There has been a fair business doing and the demand is regular and prices are well maintained on the basis of 3s. 10d. to 4s. per lb., according to quantity. There is an ample supply coming forward, with regular arrivals from Canada, which metal is also finding its way to Continental ports.

CASCARILLA.—The exports of cascarilla bark and sittings from the Bahamas during 1923 showed a decided increase to 44,176 lb., valued at \$30,604 in 1923, compared with 33,666 lb., valued at \$14,610 in 1927. In 1928 cascarilla bark sittings to the amount of 31,669 lb., with a declared value of \$12,421, went to the United States, showing a large increase over 1927, when they amounted to 8,727 lb. and \$2,710.

CASTORUM.—Owing to the changed conditions of sale we understand that the annual auction of the Hudson's Bay Co. will not take place this year.

CHAMOMILES are higher and supplies are getting into smaller compass. Good first Belgian pickings are offered at 270s., and for brownish third pickings (1929) 220s. is wanted. Old crop (1925-27) appears to have been cleared.

CLOVES have been quiet, with sales of Zanzibar on the spot at 1s. 1d. to 1s. 1½d. per lb.; August-October shipment

is quoted at 11d., October-December at 9½d. c.i.f., and December-February at 9½d. per lb. c.i.f.

The landings of Zanzibar in London during the week ending November 9 were 400 and the deliveries 338, leaving a stock of 423, against 3,391 in 1928 and 9,630 bales in 1927. The landings of Zanzibar to date have been 6,418, against 13,586 in 1928, and the deliveries to date have been 8,382, against 17,876 in 1928. The landings of Madagascar to date have been 848, against 1,281 in 1928, and the deliveries to date 3,379, against 918 in 1928.

COD-LIVER OIL has been in more demand and prices show a rising tendency. Norwegian makers not being anxious sellers at the moment. In London, agents' prices range from about 109s. to 112s. per barrel c.i.f. for finest new Norwegian non-freezing steam-refined oil.

BERGEN, November 4.—The exports up to the end of October the following years have been as follows:—

	Hectolitres		Hectolitres
1929 .. ..	about 115,000	1927 .. ..	about 79,131
1928 .. ..	65,079	1926 .. ..	97,000

As is apparent from the above table, this year's export has been unusually large, and it has never previously reached such a quantity. The production this year for the whole country was about 92,000 hectolitres, but there was a considerable quantity remaining over from previous years. However, stocks are now much reduced and are in firm hands.

It is obvious that the consumption this year, owing to the low prices, has had a great impetus, and, in addition to this, a large portion of the output was utilised for veterinary purposes. The producers of medicinal oil are very discontented with the market as the export price throughout the whole season has not advanced. This is to a large extent due to the keen competition. The demand from abroad is large, and there is every likelihood that an advance in the prices will take place before the opening of the new season, and it is only reasonable to suppose that the stock will be almost exhausted before the new production will arrive on the market. The prices this year have been altogether in the buyers' favour, despite the large export. At the corresponding period of last year the prices for medicinal non-freezing oil were about 150s. per barrel c.i.f. London.

Any downward tendency from the present prices cannot be expected, and some large exporters prefer to cover themselves for some time hence. Should it turn out that the liver for the coming season should be of inferior quality it is only reasonable to presume that the prices will be considerably higher than this year.

COLCHICUM ROOT is offered at 37s. 6d. per cwt. c.i.f.

CORN PRODUCTS, ETC.—Guaranteed water-white English and American *glucose* (corn syrup) is unchanged at 22s. per cwt. ex store, London. Dutch *maize starch powder* (cornflour) is 15s. 6d. per cwt. on the spot; American up to the end of the year is 16s. 3d. per cwt. ex store, London. Pearl starch is 15s. 9d. per cwt. ex store, London. Dutch *maize starch crystals* is 17s. 6d. on the spot, and American up to the end of the year is 16s. per cwt. ex store, London. Dutch *dextrin* is quoted at 22s. to 26s. per cwt. on the spot as to quality. American canary is 19s. 4½d., and white 19s. 1½d. ex store, London. Dutch *farina* is 13s. per cwt. on the spot, for prompt shipment 10s. 3d. per cwt. f.o.b. is wanted for new crop, and 10s. 6d. f.o.b. for October to June shipment.

DIGITALIS LEAVES.—Foreign are quoted at 65s. per cwt. c.i.f.

GENTIAN is quoted at 37s. 6d. per cwt. c.i.f. to arrive.

GRAINS OF PARADISE are offered at the lower price of 1s. per lb. c.i.f.

GUM ACACIA.—Owing to further pressure from speculators and the absence of demand, prices have further declined and a considerable quantity has changed hands, particularly for December-January shipment. The position is, of course, highly speculative, because all sales made must be covered in, and actually new-crop gum does not commence to arrive in the primary markets until the end of November, and then only in small lots, gradually increasing until April, when the bulk of the arrivals come into the market. All these "bear" sales may tend to a reaction in the price, because it is reasonable to assume that the December-January position will be much in demand owing to the depleted stocks here and the absence of any "carry over" in the Sudan. In any case, before it is possible to get back to normal, last year's deficiency of 8,000 tons has to be made up, and since usually there is a "carry over" of between 2,000 to 3,000 tons of old crop in the Sudan, this year's crop actually starts with a deficiency of 10,000 tons. The average normal crop is 22,000 to 24,000 tons per annum. Current London prices are:—Kordofan cleaned spot, 120s.; new crop December-January shipment, 72s. c.i.f.; January-February shipment, 70s. c.i.f.; natural, 115s. spot; new crop December-January shipment, 70s. c.i.f.; natural, 115s. spot; new crop December-January shipment, 70s. c.i.f.; January-February shipment, 68s. c.i.f.; Talha, 57s. 6d. spot, new crop January-February shipment, 35s.; and February-March shipment, 33s. c.i.f. A small business has been done in Persian so-called insoluble Shiraz cleaned, sellers quoting 46s. on the spot.

The stocks of acacia in London on October 31 amounted to 3,474 packages, against 6,959 in 1928, and 9,072 in 1927. The landings to date have been 16,384, against 13,487, and the deliveries to date 18,099, against 14,407 last year.



**HENBANE LEAVES.**—Hungarian are quoted at 50s. per cwt. c.i.f., and Russian at 39s. 6d. c.i.f.

**INSECT FLOWERS.**—The final estimate (October 21) of the Japanese Government Farm Products Inspection Bureau, Hokkaido, gives the following figures for the acreage and production in Hokkaido:—

	1927	1928	1929
Acreage .....	22,588	21,856	23,707
Production (short tons) ..	3,753	4,154	3,860

**IPÊCACUANHA** remains firm at from 16s. to 16s. 6d. per lb. for Matto Grosso as to quality, and Minas is 15s. 6d. to 15s. 9d.

The landings in London during October consisted of 74 Matto Grosso only, the deliveries being 82 Matto Grosso only. The stock of Matto Grosso on October 31 was 174, against 313 a year ago; the landings of Matto Grosso to date (October 31) have been 424, against 380, while the deliveries have been 406, against 304 a year ago.

**LIQUORICE ROOT.**—Natural Sicilian is selling at 17s. per cwt.; single peeled Russian is quoted at 30s., and double peeled Levant at 35s. per cwt.

**LIME JUICE.**—The exports from British Guiana during the period January 1 to August 31, 1929, were 10,275 gallons.

**MENTHOL.**—Higher prices are quoted from Japan, but second-hand sellers in London only slightly follow the advance, quoting Kobayashi-Suzuki for November-December shipment and January-March at 13s. 9d. per lb. c.i.f., while first hands from Japan quote 14s. 4½d. c.i.f. Spot value of Kobayashi-Suzuki is 15s. 6d. per lb.

**MERCURY** is unchanged, the market appearing to be well under control on the spot, this being due to the fact that the quantities offering from outside sources are very restricted. The terms of the Combine for delivery ex wharf for upward of ten bottles stands at £22 2s. 6d. net, while the quotation for shipment for 20 bottles upwards is £21 16s. 3d. net. There has been quite a fair demand going on on the part of home consumers, who seem to be fairly well reconciled to the current price, although it is comparatively high. Small lots have been lately shipped to Belgium from this side, and also to Germany. Spot quotations in the open market, less the usual discount, stand at £22 17s. 6d. to £23 2s. 6d.

**OPTUM.**—The London spot position remains unchanged at from 2s. 6½d. to 2s. 7d. per unit for usual Turkey druggists' quality. In the countries of production, however, the situation is rather firmer, as some large purchases have been reported on behalf of the United States.

**CONSTANTINOPLE, October 31**—During the past fortnight arrivals were as follows: Druggists', 724; "softs", 256; and Malatia, 108 cases, compared with 1,306, 348 and 85 cases respectively in the same period of 1928. Sales included 90 cases druggists' at £T37-40½ per oke, 36 cases "softs" at £T37-40½, and 18 cases Malatia at £T37-38½. Stocks bottled: Druggists', 576; "softs", 114; and Malatia, 121 cases, against 1,316, 332, and 122 cases last year. The demand in general has been very good during the past few days and buying has been done for all quarters taking everything offered. It is felt that there might be strong motives to explain this consumption.

According to figures published by the Direction-General of Statistics, Sofia, exports of opium from Bulgaria during June 1929 amounted to 477 kilos, which quantity was exported to Germany. The total exports during the period January-June 1929, was 2,275 kilos, valued at 5,102,073 leva.

**PEPPER** is easier. Fair black Singapore is quoted at 1s. 2d. per lb. on the spot; to arrive, October-December shipment is 1s. 0½d., and January-March 1s. 0½d. c.i.f. Lampong is 1s. 2d. spot; to arrive, sales include August-October shipment at 1s. 0½d. to 1s. 1d. to 1s. 0½d., October-December at 1s. 0½d. to 1s. 0½d., and January-March at 1s. 0½d. to 1s. 0½d. c.i.f. Tellicherry is 1s. 3½d. spot and January-March shipment 12s. c.i.f. Alleppy is 1s. 3d. spot and January-March shipment 12s. c.i.f. White Muntok is easier at 1s. 10½d. spot; August-October shipment has been sold at 1s. 9½d. to 1s. 10d. c.i.f.; October-December and January-March shipments at 1s. 8½d. to 1s. 8d. to 1s. 8½d. c.i.f.

**PIMENTO** is quiet and easier, with spot sellers at 10d. per lb.; to arrive, sellers of October-December shipment quote 90s. per cwt. c.i.f.

**RUBBER** has experienced another severe set-back, and at one period to-day (Wednesday) spot fell to the low level of 7½d. per lb. Later in the afternoon there were persistent rumours in the market of partial restrictions by the leading producers, and the market suddenly jumped fully ½d. per lb. This sharp advance was greatly assisted by brisk covering of nervous "bear" operators, and the market closed quite firm. These sudden movements tend to show the very sensitive condition of the market. Arrivals last week totalled 2,450 tons, whilst deliveries were 1,240 tons, showing a further increase of 1,210 tons in the stocks. The London stock now stands at 49,302 tons, against 21,494 tons at the corresponding period last year. The Liverpool stock stands at 16,158 tons. Quotations (Wednesday, 5 p.m.):—No. 1 standard ribbed smoked sheet, spot

and November, 8½d.; December, 8d.; January-March, 8d.; April-June, 8½d. per lb.

**SARSAPARILLA.**—The landings in London during October were 56 bales and the deliveries 18, leaving a stock of 96 against 84. The landings to date (October 31) have been 293 bales against 293 a year ago, and the deliveries to date 305 against 328 a year ago.

**SEEDS.**—**ANISE.**—Spanish is 67s. 6d. and Russian firm at 31s. **CANARY.**—A parcel of old crop Mazagan is now landing, and the price asked is 30s. ex wharf. New crop for November-December shipment is quoted 28s. 6d. c.i.f. Tangier on spot remains at 28s., and for prompt shipment 27s. c.i.f. is quoted. Morocco f.a.q. (4 per cent.) is now offering in 25-ton lots at 26s. 6d. c.i.f. for November-December shipment. The spot price remains at 27s. 6d. ex store. **CUMIN.**—Malta for shipment is now quoted at 60s. c.i.f. On the spot 70s. is being asked for f.a.q. Morocco for December-January shipment is a little lower at 56s. 6d. c.i.f. to 57s. 6d. c.i.f.; spot, the price is unchanged at 65s. **FENUGREEK** on the spot is 19s. 6d., and for November-December shipment the price now quoted is 16s. 6d. c.i.f. **CORIANDE** remains unchanged at 10s. per cwt. on the spot. For shipment, business has been passing at 8s. 3d. c.i.f. for 20-ton lots. **FENNEL** is again easier at 62s. 6d. spot, and forward 60s. c.i.f. is quoted. **MUSTARD** is unchanged, 27s. 6d. to 31s. per cwt. on spot, according to quality. **CARAWAY.**—Dutch on spot for old crop is firm at 40s., and new crop 39s. ex store. New crop Dutch for prompt shipment is quoted at 38s. c.i.f. and December-January shipment at 38s. 3d. c.i.f. **NIGER.**—Bombay, 3 per cent., no change; old crop, November-December shipment, £16 per ton c.i.f. New crop for January-February shipment, £15 per ton c.i.f.

**SENNA PODS.**—There is a genuine shortage of Alexandrian and Tinnevely senna pods, and parcels for forward shipment are practically unobtainable at prices even higher than quotations for spot parcels. New crop Alexandrian pods will not be available until March 1930. Tinnevely senna (1929 crop) is finished, and the next main crop will be available during June and July 1930. Recently there has been a considerable demand for all grades of senna, with the result that merchants here have been endeavouring to buy all available lots on the Continent, but the quantities forthcoming were very small. Prices to-day are: Alexandrian senna pods, hand-picked, 4s. to 5s. lb. according to quality; manufacturing grade, 1s. lb.; Tinnevely senna pods, 8½d. to 9½d. lb.; fair average quality, 4d. to 4½d. lb., ex wharf London. The landings in London during October were 376 and the deliveries 255, leaving a stock of 1,844 against 1,404 a year ago. The landings to date (October 31) have been 2,638 against 2,200, and the deliveries 2,248 against 2,744 a year ago.

**SHELLAC** is lower, the spot price of usual standard TN orange quality having declined to 167s. 6d. per cwt.; fine orange is 207s. 6d. to 255s., pure button 220s., and AC cakey 220s. To arrive, TN for November-December shipment has declined to 156s. c.i.f. and December-January shipment to 157s. c.i.f. Sales for delivery include December at 164s. to 156s., March at 167s. 6d. to 160s., and May at 165s. to 162s.

**SQUILL** is quiet, with fairly good white offering at 24s. 6d. and No. 2 at 20s. per cwt.

**WAX (VEGETABLE).**—The recent financial disturbance has brought out cheaper sellers of *Carnauba* on the Continent, but London is unaffected. Spot sellers quote fatty grey at 114s. per cwt. and 106s. c.i.f. Chalky on the spot is 112s. and 103s. c.i.f. Primera is 160s. spot and 147s. 6d. c.i.f., Mediana is 150s. spot and 140s. c.i.f. *Japanese* vegetable wax is quiet at 81s. 6d. on the spot and at 73s. 6d. c.i.f. for November-January shipment.

### Essential Oils

THERE has been little activity in essential oils during the past week and price changes are few and unimportant. Anise is steady. Citrus oils are weaker. Citronella is fairly steady. American peppermint is slow of sale.

The following are the quantities and values of natural essential oils (other than turpentine) imported into and re-exported from Great Britain during October 1929, compared with the same month in 1927 and 1928 respectively, also for the ten months ending October in the respective years:—

		1927	1928	1929
October imports	lb.	374,039	387,742	288,888
	value	£105,583	£98,041	£87,575
Jan.-Oct. imports	lb.	3,158,317	3,631,287	3,205,684
	value	£907,367	£995,717	£1,131,239
October re-exports	lb.	65,699	55,074	83,110
	value	£24,512	£29,104	£32,926
Jan.-Oct. re-exports	lb.	643,349	654,637	718,812
	value	£257,668	£251,216	£313,659

**ANISE (STAR).**—"Red Ship" in leads on the spot is quoted at from 3s. 11d. to 4s. per lb., and for shipment at about 3s. 1d. per lb. c.i.f. Prices for tins and drums are practically unchanged.



BERGAMOT is quoted on the spot at from 14s. to 14s. 3d. per lb., and at 13s. 9d. to 14s. per lb. c.i.f. for new crop to come forward.

CANANGA.—Java is quoted at 10s. per lb. c.i.f. in drums and at from 10s. 4d. to 10s. 6d. per lb. spot.

CASSIA is dull, and for 80 to 85 per cent. 4s. 4d. per lb. is the nominal price on spot. To come forward, 3s. 9d. per lb. c.i.f. is quoted.

CITRONELLA.—Java is fairly steady at about 3s. 2d. per lb. spot and at from 3s. 2d. to 3s. 3d. per lb. c.i.f. for prompt shipment. Ceylon is slightly weaker at 2s. 3d. per lb. spot and is offered at 2s. 2d. per lb. c.i.f. for prompt shipment in drums. During October citronella has had a firm market in Java, and in sympathy with the price ruling there, the price advanced on both European and American markets. It is difficult to say which way the market will go in the near future, as it is also reported that the smaller production in Java, which is not sufficient to cover world consumption, may be considered favourable to the "bulls." Mention is made of the fact that many producers in Java who sold their expected output at the beginning of the year had to cover when it became apparent that the output as expected and sold did not materialise.

CLOVE.—English drawn is quoted at from 7s. 6d. to 7s. 9d. per lb. spot. Madagascar is unchanged at about 5s. 6d. per lb. spot.

EUCALYPTUS is unchanged at 1s. 8½d. per lb. for 70 to 75 per cent., and at from 1s. 10d. to 1s. 11d. per lb. for higher phenol content.

GERANIUM.—Bourbon is quoted at 17s. 6d. per lb. on the spot, and it is difficult to get quotations for forward shipment. Algerian is quoted at from 19s. 6d. to 20s. per lb. spot, and to come forward at 19s. 3d. to 19s. 6d. per lb. c.i.f., according to seller.

LEMON.—New crop machine-made is quoted for January shipment at 9s. 9d. per lb. c.i.f. Spot prices of genuine hand-pressed vary from 11s. 9d. to 12s. 3d. per lb., and to come forward at from 11s. to 11s. 6d. per lb. c.i.f., according to citral content.

MANDARIN is quoted on the spot at from 22s. 6d. to 23s. per lb., and new crop to come forward at from 20s. to 22s. per lb., according to seller.

ORANGE is easier and Sicilian bitter orange is quoted on the spot at 14s. per lb., and to come forward at about 13s. 9d. per lb. c.i.f. Sweet orange on spot is about 13s. 9d. per lb., and new crop to come forward is offered at from 11s. 2d. to 13s. 3d. per lb. c.i.f.

PEPPERMINT.—The spot prices of Japanese dementholised oil are practically unchanged at from 5s. to 5s. 3d. per lb. as to brand and seller; forward values are 4s. 3d. c.i.f. for five brands and 4s. 6d. c.i.f. for Kobayashi-Suzuki. Natural American oil is difficult to sell, with drums offering at from about 13s. 6d. to 13s. 9d., and tins at from 13s. 9d. to 14s. per lb. H.G.H. is quoted at from 21s. to 21s. 6d. per lb.

The final estimate (October 21) of the Japanese Government Farm Products Inspection Bureau, Hokkaido, gives the following figures for crude peppermint oil for that province:—

	1927	1928	1929
Acreage .. ..	33,435	31,934	31,527
Production (lb.) ..	1,030,594	793,920	921,240

SPERMINT.—The spot price is quoted at from 20s. to 20s. 6d. per lb., according to quantity.

WORMSEED (CHENOPodium).—This year's total production in the United States is reported to be not over 19,000 lb., compared with 93,000 lb. last year, but last year's production was abnormally large. The estimated world's consumption is about 75,000 lb., and higher prices seem probable. The c.i.f. price quoted is at from 15s. 6d. to 15s. 9d. per lb., and the "carry over" stocks at the source and in New York are said to total 60,000 lb.

The following arrivals have taken place from the countries indicated during the period October 23 to October 29 (inclusive): Almond (Fr.) 22 cs.; anise (H.-K.) 10 cs.; bergamot (It.) 4 cs.; cajeput (Dut. Poss.) 2 dm.; caraway (Neth.) 2 dm.; cassia (Ch.) 20 cs.; cedarwood (U.S.) 1 dm. 5 cs.; citronella (Cey.) 2 dm.; clove (Ger.) 1 cs.; (Cey.) 1 dm.; copaiba (U.S.) 5 cs.; geranium (Fr.) 4 dm.; laurel (It.) 10 cs.; lemon (It.) 53 cs.; mandarin (It.) 1 cs.; nutmeg (U.S.) 10 cs.; patchouli (Sey.) 1 dm.; peppermint (Jap.) 70 cs.; (U.S.) 2 cs.; sandalwood (Aust.) 56 cs.; wormwood (U.S.) 1 cs.; undescribed (Fr.) 37 cs.

#### Pharmaceutical Chemicals, etc.

THERE is again little change calling for comment in this section. The general tone is steady throughout on quotation, while price-cutting is evident in some directions. Citric acid is weak. Phenyl ethylbarbituric acid is dearer. Business has been on restricted lines.

ACETANILIDE is unchanged on a quiet market: B.P. crystals and powder, 1s. 4½d. to 1s. 6d. per lb., as to quantity.

AMIDOPYRIN is steady, with business slow: spot, 10s. 7d. to 11s. 1d. per lb. as to quantity; f.o.b., ten cwt., 10s. 6d.; five cwt., 10s. 8d.

AMYL SALICYLATE.—Makers quote at 2s. 6d. per lb.

ASPIRIN continues to be quoted at from 2s. 9d. to 2s. 11d. per lb. on a steady but by no means active market.

BARBITONE on spot is well maintained as quoted from 7s. 6d. to about 7s. 9d. per lb., as to quantity.

BENZALDEHYDE (.03) remains slow of sale, with dealers offering quantities at 1s. 10d., and smaller lots up to 2s.

BENZOIC ACID (B.P.) is very quiet at the moment: quantities ex works, 2s. 0½d. to 2s. 1d.; spot parcels, 2s. 1½d. to 2s. 2d. per lb.

BROMIDES.—The move to lower prices brought about by competition has not extended beyond the figures mentioned in our last report: dealers quote ammonium, 1s. 10d.; potassium, B.P. crystals, 1s. 6½d.; granular, barely 1s. 6d.; sodium, B.P., about 1s. 9d. Home makers' quoted prices for cwt. lots as follows, with ton lots about one penny per lb. less: ammonium, 1s. 11d.; potassium, B.P. crystals, 1s. 6½d.; granular, 1s. 6½d.; sodium, B.P., 1s. 9½d. per lb.

CALCIUM LACTATE is steady, with a limited business moving: quantities, from 1s. 2d.; smaller parcels, up to 1s. 3½d.

CHLORAL HYDRATE is unchanged on a slow market: duty-paid crystals are quoted at 3s. 1d. to 3s. 3d. per lb.

CITRIC ACID (B.P. crystals).—There is evidence of holders desiring to clear stocks, with the result that the market is weak as quoted on spot: foreign, 2s. to 2s. 0½d. per lb., less 5 per cent.; forward, 1s. 11½d. per lb. c.i.f., less 5 per cent.

CREAM OF TARTAR is also slow of sale and the quoted price for foreign of 102s. 6d. to 103s. per cwt., less 2½ per cent., is not easily obtainable, except for small lots.

CREOSOTE (B.P.) is unchanged, with dealers quoting 1s. 8d. to 1s. 9d. per lb., as to quantity.

CREOSOTE CARBONATE is about steady on a slow market: dealers quote 5s. 8d. to 6s. per lb.

GUAIACOL CARBONATE remains dull, with spot prices unchanged at 4s. 6d. to 4s. 10d. per lb.

HEXAMINE is steady at the agreed prices of 2s. 2d. to 2s. 4d. per lb., and there does not appear to be many "outside" parcels about.

HYDROQUINONE continues to be quoted on spot at 3s. 8d. to 3s. 11d. per lb. as to quantity.

METHYL SALICYLATE (B.P.) is meeting with fair business and prices are steady at 1s. 6d. to 1s. 8d. per lb. as to quantity.

METHYL SULPHONAL continues steady but quiet: spot, 12s. 7d. to 13s. 10d. per lb. as to quantity.

PARA-FORMALDEHYDE is quiet: 100 per cent. powder, in quantities, 1s. 7d. per lb. in kegs; smaller parcels, 1s. 8d.

PARALDEHYDE continues to sell at cut prices: quoted from 1s. 1d. to 1s. 4d. per lb. as to quantity and packing.

PHENACETIN continues unchanged on quotation on spot at 3s. 2½d. to 3s. 7d. per lb., while there is an occasional offer at a lower figure; business has remained poor.

PHENAZONE is not meeting with much demand: controlled prices continue to operate at 5s. 9d. to 6s. 1d. per lb. as to quantity.

PHENOLPHTHALEIN is steady but quiet: controlled prices are well maintained at 5s. 11d. to 6s. 1½d. per lb.

PHENYL ETHYLBARBITURIC ACID, which up to now has been quoted in the region of 60s. per lb., has advanced on spot to about 65s. per lb., in consequence of developments on the Continent. The sodium salt is reported to be affected to the same extent.

POTASSIUM PERMANGANATE (B.P.) continues to be quoted from 5½d. per lb. for quantities in drums; druggists' parcels from 6d. per lb.

POTASSIUM SULPHOGUAIACOLATE is quiet, with spot prices at about 3s. 6d. to 4s. per lb. as to quantity.

RESORCIN continues to be quoted steadily at from 2s. 11d. to 3s. 2d. per lb. as to quantity; market quiet.

SALICYLIC ACID (B.P.) is unchanged at home makers' prices of 1s. 5d. to 1s. 7d. per lb. as to quantity.

SALOL remains quiet and unchanged at about 3s. 7½d. to 3s. 10½d. per lb. as to quantity.

SODIUM DIETHYLBARBITURATE is steady at Convention prices: spot, about 10s. per lb.; f.o.b. Continent, five cwt., 9s. 7½d.; up to 10s. 3½d. per lb. for small parcels.

SULPHONAL is steady but slow on spot: crystals, 10s. 1d. to 11s. 2d. per lb. as to quantity; powdered, 1½d. per lb. more.

TANNIC ACID (B.P. *levis*) is unchanged on a slow market: quantities, 2s. 10d.; smaller parcels, up to 3s. per lb.

TARTARIC ACID (B.P. crystals).—There is no improvement in business to report, but prices are being maintained at about unchanged rates: foreign on spot, 1s. 4d. to 1s. 4½d. per lb., less 5 per cent., as to quantity; forward, 1s. 4d., less 5 per cent. c.i.f., for large parcels only.

THYMOL is not meeting with much business: synthetic fine white, 9s. 1d. to 9s. 3d. per lb.; ex atowan seed, 11s. 3d.

VANILLIN continues a competitive item between clove oil material, which is offered at about 14s. per lb. in cwt. lots and cheaper for quantities.



## Industrial Chemicals, etc.

London, November 13.

A STEADY but limited volume of business continues in the industrial chemical market. The tone throughout is well maintained and there is no change of importance to record.

ACETIC ACID continues in steady demand, with dealers' prices unchanged: 80 per cent. technical, £36 15s.; 80 per cent. pure, £37 per ton in barrels; glacial, pharmaceutical, 99 to 100 per cent., £66 in glass demijohns; glacial in barrels, £55 ex store.

ACETONE is unchanged, with a fair volume of business passing: B.G.S. in drums, £76 10s. to £85 per ton ex store.

AMMONIA (ANHYDROUS) is steady, with the usual spot business moving: 99.95 per cent. in loaned cylinders, 10d. to 1s. per lb., carriage paid; slightly less for big contracts.

AMMONIUM CHLORIDE is fully maintained at £21 5s. to £21 10s. per ton for grey galvanising in casks, ex store.

ARSENIC.—There is more inquiry, chiefly for export. Quotations for fair quantities are at about £15 17s. 6d. per ton for Cornish white powdered, f.o.r. mines.

BARIUM CHLORIDE continues to be offered on spot by dealers at about £11 10s. per ton for 98 to 100 per cent. prime white crystals in casks, ex store; forward, £9 15s. f.o.b. Continent.

CAUSTIC POTASH continues at the old Convention prices, but severe competition is evident, which may bring a break in due course: spot, solid, 88 to 92 per cent., £31 15s. to £36 15s. per ton in drums, ex store; c.i.f., 30s. per ton less.

COBALT.—There is a moderate demand for metal, officially quoted at 10s. per lb., but this figure is occasionally shaded for good quantities. Terms for oxide are steadily held, being about 8s. per lb. for black and 8s. 10d. for grey.

COPPER SULPHATE.—The export trade demand is still slow, and quotations may be called £26 10s. to £27 f.o.b., less 5 per cent. for casks. There is still apparently a good deal of stock on the Continent which is offering cheaply, down to about £24 f.o.b.

FORMALDEHYDE continues competitive and quantities would be at cheaper prices than the quoted figures of about £34 per ton for 40 per cent. by volume in casks, ex store.

ISOPROPYL ALCOHOL continues to move fairly well, with good quality at 11s. to 12s. per gallon in drums, carriage paid.

LEAD PRODUCTS.—There is nothing to add to our comments of last week. Convention prices continue unchanged and there is no intimation that a reduction has been decided upon, although this seems likely with present outside competition and in view of the present metal prices.

LITHOPONE is steady and a fairly good business is being done: dealers quote 30 per cent. Continental red seal at £19 10s. per ton in casks, ex store; slightly less for contracts.

OXALIC ACID is fully held at former rates, with business moving well: quantities to arrive, £32 10s. to £33 per ton in casks, ex wharf; spot parcels, from 33s. 6d. per cwt.

POTASSIUM CARBONATE has been receiving a little more inquiry, with dealers' prices steady: 90 to 92 per cent., £23 10s. to £24; 96 to 98 per cent., £25 10s. to £26 per ton in casks, ex store; slightly less for contracts.

POTASSIUM CHLORATE is slow of sale, with quantities to arrive quoted down to 2½d. to 2½d. per lb., ex wharf; spot, from 3d. per lb., ex store.

POTASSIUM PERMANGANATE is still quiet: commercial quality in two-cwt. drums, 5d. per lb.; smaller lots, 5½d.

POTASSIUM PRUSSIAN is moving fairly well, with dealers' prices steady: quantities, £63 10s. to £65; single casks, 7d.; small parcels, 7½d. per lb., ex store.

SAL AMMONIAC is a fairly good market so far as inquiry is concerned, while dealers' prices are steady: dog-tooth crystals, £32; medium, £29; fine white crystals, £17 10s. per ton in casks, ex store; slightly less for contracts.

SALTCAKE is steady and business is good: home trade, £2 15s. per ton in bulk, delivered.

SODIUM ACETATE is unsteady, with offers from £21 to £21 10s. per ton in casks, ex store.

SODIUM HYPOSULPHITE is unchanged, with business slow: dealers quote pea crystals in one-cwt. kegs, £15; commercial quality, £9 10s. per ton in casks, ex store. British makers' price for pea crystals to home consumers on contract, £15 per ton, carriage paid to buyer's station.

SODIUM PRUSSIAN continues to move fairly well, with dealers' prices steady: quantities, 4½d. to 5d.; smaller parcels, 5½d. to 5½d. per lb., ex store.

SULPHUR.—Incoming supplies of crude are fairly well absorbed, partly on current contracts, and prices range from £5 12s. 6d. to £5 17s. 6d. The quotation for Sicilian flowers stands at £12 7s. 6d., for refined ground at £11, and roll at £9 15s. per ton, all c.i.f. to arrive.

COAL-TAR PRODUCTS, ETC.—The two items of interest in this market are carbolic acid crystals, which continue in short supply, and cresylic acid, for which there is quite a brisk

demand on a firm market. ANILINE OIL continues firm at about 8½d. per lb., packages extra, carriage paid. ANILINE SALT is unchanged at about 8½d. per lb., packages extra, carriage paid. BETANAPHTHOL is unchanged at from 9½d. to 10d. per lb., carriage paid. CARBOLIC ACID.—Generally speaking, the position is unchanged. Prices are from 7½d. to 8d. per lb., according to quantity. Crude carbolic 60's is fully maintained at 2s. 5d. to 2s. 6d. per gallon naked at works. CREOSOTE OIL is unchanged, with the market slow: ex works, 3d. per gallon in bulk quantities. CRESYLIC ACID.—There is very good business moving and prices as quoted are firm: pale 97 to 99 per cent., 2s. 2d. to 2s. 4d.; refined, 2s. 8d. to 2s. 11d.; dark 9½ per cent., 1s. 9d. to 1s. 11d. per gallon naked at works. NAPHTHALENE continues quiet and unchanged: flakes and balls, £15 15s. to £16 per ton in cases, ex wharf. METHYL ALCOHOL is in small demand: prices are unchanged at about £44 per ton, and less for quantities, in drums, ex store. PYRIDINE, TOLUOL, XYLOL and PITCH are unchanged.

## Fixed Oils, etc.

A NUMBER of products are cheaper this week, including acid oils, ground nut, palm and wood oils. American turpentine and linseed oil are both much cheaper on rather weak markets. Business generally has been poor. ACID OILS have been dull and easier: coconut and/or palm kernel, 32s.; ground nut, 30s. 6d.; soya, 27s. 3d. spot. CASTOR remains quiet: pharmaceutical, 49s.; first pressings, 44s.; second pressings, 41s. per cwt. in barrels on the spot in not less than one-ton lots. COCONUT.—Business has remained slow: deodorised, spot, 41s.; Ceylon, 33s. 6d. c.i.f.; Coclin, 42s. c.i.f. COTTON.—Quiet markets are reported, with values unchanged: deodorised, 40s. 6d.; common edible, 38s. 6d.; soapmaking, 36s.; crude, 33s. 6d. spot. GROUND NUT is easier and still dull: deodorised, 44s. spot; crude Oriental, 37s. 6d. c.i.f. PALM KERNEL.—Prices are about unchanged, with the market quiet: deodorised, 42s.; crude, 36s. spot. PALM.—Poor business is reported, while prices on balance for all grades show a slight reduction. On spot, Lagos, 32s. 6d.; softs, 31s.; mediums, 31s. 9d.; hards, 33s. 6d.; bleached, 33s. 10½d. spot. RAPE has been slow and is a point easier: refined, 46s. 6d.; crude, 45s. spot. SOYA is dull and easier: deodorised, 41s. 6d.; crude, 36s. 6d. spot. LINSEED (raw, naked) has been weak and nervous and closes at much cheaper prices, in sympathy with seed. On spot, 43s. 9d.; November-December, 39s. 9d.; January-April, 36s.; May-August, 36s. 3d. Boiled oil, on spot, 47s. TURPENTINE has been irregular, but further in buyers' favour. American stocks and receipts for last week were reported to be again smaller. The London spot prices closed at 42s.; November-December, 42s. 3d.; January-April, 43s. 3d. per cwt. Last week's deliveries were 2,197 barrels, making a total since January 1 of 66,480 barrels, against 90,845 barrels for the same period last year. Stocks were returned at 24,003 barrels against 32,219 barrels a year ago. Including the floats, the London visible supply made up at 51,308 barrels, this comparing with 36,569 barrels at the same date last year. RESIN.—The tendency of prices eased further, but this has not resulted in any material increase of business. C.i.f. terms for American B/M 18s. 6d., N 18s. 7½d., W/G 19s. 4½d., and W/W 20s. per cwt. French resin was a little easier, in sympathy with American, and W/W was quoted at 18s. 10½d. Wood.—Hankow in barrels on spot is easier on a dull market at 73s. 6d. per cwt.

LUBRICATING, MINERAL, BURNING OILS, ETC.—Solvent naphthas are slightly easier, while other items are unchanged, with the volume of business passing quite moderate. BENZOL is unchanged: standard motor 90's, 1s. 6d. per gallon, ex works, in tank wagons, in the provinces and 1s. 8d. ex London works. FUEL OIL continues quiet: 950 gravity, £3 5s.; 890 gravity, £3 17s. 6d. per ton, ex tank; cheaper forward. PARAFFIN OILS are unchanged: American standard white, 1s.; water-white, 1s. 1d. per gallon, barrels, ex wharf. PARAFFIN WAX and SCALE.—Wax continues steady from 2d. to 5d. per lb., according to melting point, in bags. Scale is firm for shipment at about £18 2s. 6d. per ton, c.i.f. U.K. port. WHITE OILS are steady: special No. 1, £25 10s.; No. 2, £24 10s.; No. 3, half-white, £22; No. 4, half-white, £20 per ton, drums and barrels free, ex wharf. SOLVENT NAPHTHAS are quicker and slightly easier: 90 to 160, 1s. 1d. to 1s. 2d.; heavy 90 to 190, about 1s. per gallon, naked at works. PETROLEUM JELLIES are brighter: white to snow-white, £37 10s. to £47 10s.; amber and yellow, £18 10s. to £22; dark stiff green, £12 7s. 6d. per ton, barrels free, ex wharf. LUBRICATING OILS are unchanged and quiet: spot, pales, £9 15s. to £21 5s.; reds, £11 to £21; dark cylinders, £13 10s. to £33 10s.; filtered cylinders, £23 to £41 per ton as to quantity, less 2½ per cent. SOLUBLE OILS and CUTTING COMPOUNDS are unchanged from £20 to £28 per ton net. No. 1 RUSSIAN OIL on spot is offered at £14 10s. per ton, less 2½ per cent., barrels free, ex wharf.





Letters for this section should be written on one side of the paper only. Correspondents may adopt an assumed name for purposes of publication, but must in all cases furnish their real name and address to the Editor.

### Burying the Hatchet

SIR,—Is it not time that the Aspro controversy be ended? The wonderful fight made by the R.P.U. under the leadership of Mr. Mallinson may not, owing to the fact that the Union has not had the support of the whole trade, have attained its primary object, but it has resulted in a factor that is going to be—in fact, has already been—of inestimable value in negotiations with other firms, the majority of whom are not so financially powerful as Aspro. This factor is the enormous amount of money that our opponents have been forced to expend in extra advertising in combating our effort. Our great fight has only been possible because of the loyal support given by many men in a small way of business. These men can least afford to ignore the profitable display terms offered, and should not be expected to continue any longer to sacrifice their interests for a principle that is not supported by the trade as a whole. Indeed, this loss in display bonus is the smallest loss from which they are suffering; a point of far greater importance is that they are being hit by unequal competition, inasmuch as they are unable to show a well-advertised line which is displayed by many of the chain stores. Our fight against the latter, now and in the future, is of vastly greater moment than that against any manufacturer; and yet the longer the Aspro fight continues the greater the business, direct and indirect, we are putting into their hands. Though we rightly blame Aspro for putting the sale of their lines into the control of other dealers in the way they did, we must own that it was partly our own fault in not giving it the support to which a line that is accepted by the P.A.T.A. is entitled, and, as no business man could expect them to return to the *status quo ante* and turn down those who assisted them in the dispute, the best way to get the lost business back is to go out and get it for ourselves, remembering that the public will always buy medicines from a chemist rather than from a grocer. We have taught Aspro a lesson that I am sure they would recognise, but let us remember that they have also taught us something of prime importance, especially at the present time. Here is a line sold by all chemists and stores, and, at the same time, by grocers and numerous small shopkeepers. I am told that their list of wholesale distributors is the biggest of its kind, yet *they have managed to protect their retail selling price!* What an object-lesson to those manufacturers who claim that price protection is impossible once a line is largely handled outside the legitimate drug trade! Before long we small chemists will need the help of manufacturers who stand firm for price protection. One such firm is, evidently, Aspro. Why not bury the hatchet and instead of fighting them, get information from them as to what method they employ of enforcing the maintenance of their selling price. Such information alone would be well worth finishing the dispute.

Yours faithfully,

E. A. ATKINS.

London, S.W.18.

### Terms of a Special Offer

SIR,—Further to Messrs. Edwards's letter and the price protection of their products. It is obvious that the terms which they offered were not good enough for acceptance of the P.A.T.A., so let them prove their enthusiasm for price protection by offering revised terms. There should then be no difficulty about the matter. For their information I would suggest that the only terms which will interest pharmacists are those which show 33½ per cent. profit on selling price. I would also assure them of an automatic increase of their sales

through the consequent display and general support of the retailers. If other manufacturers find it worth while, why not Messrs. Edwards?—Yours faithfully,

L. J. SLOPER.

Bournemouth.

### Mr. Corral's Pharmacy Week

SIR,—Pharmacy Week was a success—a gigantic success. More people stopped to look in my window than have done during twelve years. They stopped, they looked; they brought their friends and relations to look; and I have an idea that there were one or two "conducted tours" from neighbouring "pubs." They not only looked, but talked—and their talk was more than tinged with cynicism. Some of them passed it on through the door. They wanted to ensure that I understood their appreciation. One passed by silently; her chin was elevated; also her upper lip; but, as she is accustomed to quote "It says so in the papers," I was not unduly depressed. Not being a greedy man, I have no wish to keep the secret of this success to myself. Here it is. First, I cut out in bright red paper the separate letters of "Magna est veritas, et prevaleat," and stuck them in a graceful curve on the upper middle of the window. One man said, "That's all Greek to me, gov'nor." "That is unfortunate," I replied, "for it happens to be Latin." "What's it mean, anyhow?" he continued. "It is," I said, "a prescription; and, if you will possess your soul in patience, you'll see the ingredients later on, and possibly understand the meaning." The ingredients were as follows: In more or less isolated glory in the centre were two two-ounce vials of equal capacity. One contained four drachms of coloured water and was ticketed "The dose the doctor orders;" the other contained eight drachms of the same liquid, and bore the words "The dose you take when you faithfully follow the directions on the label." On the right was a 12-pill machine with rounder complete. The description was "Recently discovered during the gigantic upheaval known as 'having a clear up.' Probably used last *circa* A.D. 1920." Then there was a plaster iron very rusty, and unticketed. The inquiries were numerous. "What's that iron for, mister?" "It is a plaster iron." "My dad's a plasterer, but I've never seen him use one like that." "Probably not. I'm a plasterer, and I never use it." "You a plasterer? Garn, you're a chemist." "Excuse me; this is Pharmacy Week, and I'm a pharmacist." "What's that?" "I don't know." "What d'yer keep that iron for if you don't use it?" "Ornament." "Garn!" Near by were a few test-tubes, a flask, s.g. bottle, porcelain dish, and various relics of student days. Many, many times was I asked, "What do you use 'em for?" "I don't," which was invariably followed by "Why have you put 'em in the window?" the answer to which was "To show you how wonderfully clever we're supposed to be." In appropriate situations were other things. A few tablets marked "Will not harm the heart—they 'touch' your pocket." A little group of 1d. pills, 1½d. and 2d. powders sold in large quantities by pharmacists, and ticketed "To sell these requires brains, and an expensive education." My "poison cupboard," locked, and the key in the chemist's—sorry, pharmacist's—pocket. Samples of vin. aloes ferri and rhei. "These used to be wonderful—they still are." A series of ancient B.P.s., "Chemists' bibles" of various periods; once sworn by, now sworn at. And deservedly so. Group of old student books and N.H.I. script for mist. tussi nig. labelled "I had to learn all this to dispense that—'s marvellous!" Pint sample of lin. alb. N.H.I. formula next to similar sample of "My own make," latter like thick cream, former like curds and whey. "You pays your money but gets no choice." The rest of the window was filled in with things that rightly belong to dentists, hairdressers, dyers and cleaners, photographers, grocers, oil shops, chiropodists, beauty merchants, and patent-medicine vendors. Samples of junk generally of bygone days. The grouping was harmonious and the effect fine. It attracted the attention of a cultured man who occasionally comes in, and who looks more like a parson than anything. He said, "I've not come to buy anything; and I hope you will not think me rude if I ask you a question." I assured



him, and what I heard was, "Why are you in a shop like this?" I answered promptly, "On account of sins committed in some previous incarnation." "They must have been grievous sins," he said. They must. Pharmacy Week is a great idea.—Yours, etc.,

G. F. CORRAILL.

Enfield Wash.

### "Chemist" or "Pharmacist?"

SIR,—Comparisons, proverbially odious, are sometimes inevitable, and Mr. Humphrey's remarks on "Safeguarding Pharmacy" (*C. & D.*, November 2, p. 535) made me wonder if he and others do not envy the "sweet simplicity" of the French system, which reserves the right to the title of "pharmacien" to the qualified man, and the name of "pharmacie" to his establishment. The only exception to this is the relatively recently created title of "docteur en pharmacie," criticised by some medical men as ambiguous, although the French doctor in common parlance is always known as the "médecin." Any further statement as to the nature of a pharmacy's business is made by adjectives added to the name of the shop ("Pharmacie Commerciale," and so on), not to the owner's own title, which remains unmistakable and unique. But it is perhaps unnecessary to insist on a state of things which I believe is universal on the Continent, and consequently familiar to all who have crossed the Channel.—Yours faithfully,

YOUR PARIS CORRESPONDENT.

### The Great Transfer

SIR,—There are in England and Wales 400,000 hospital beds. Of these 350,000 are provided by poor-law guardians and public health authorities, whilst only 50,000 are provided by voluntary hospitals. In London there are 89,000 hospital beds, 75,000 of these belonging to the two public authorities mentioned, and 14,000 to voluntary hospitals. Thus public authorities already provide the great bulk of the hospital treatment of the sick in this country. The Local Government Act, 1929, transfers the control of poor law hospitals, infirmaries and institutions from boards of guardians to county councils and county borough councils in April next. The position of the pharmacist to be transferred from the poor law to the county council service calls for consideration. His training qualifications, technical knowledge and responsibilities entitle him to proper recognition and status, and to a better position in an infirmary than that of a subordinate officer, where the steward is a principal officer. Unity is strength in pharmacy as it is everywhere else. The value of mutual support between different sections in pharmacy cannot be over-estimated, and progress in one section helps another. I trust that hospital pharmacists will have the invaluable support of our colleagues in business, who as county councillors or ratepayers with expert knowledge possess influence which can at the present time be used to help the progress of pharmacy.—Yours faithfully,

ROBERT W. LINDSEY,

President, Guild of Public Pharmacists.

London, N.W.5.

### Organisation of Managers and Assistants

SIR,—If I may be allowed a small space by way of postscript to my letter of November 2, it would be to ask precisely for what purpose an organisation of assistants is wanted. I put in about an equal number of years as assistant and manager for individual pharmacists and for company traders, and it would not be easy now to say what the former position provides in the shape of grievances. There used to be in the old days places where hours were inordinately long and holidays difficult to get; but the trend of opinion, combined with or stimulated by legislation, has led to great improvements. The only thing left to complain of is the noxious habit a few employers practise of making frequent changes. However, such men soon get a reputation and are known in their district unfavourably. It is not easy to imagine an organisation powerful enough to pillory any individual pharmacist in business. Then we have the staffs of the companies, among which disaffection has been rife at times, if we may believe what we hear, but where no real organisations—though often attempted—has ever reached the stage when it

could stand on its own legs. If not here, with 2,000 or 3,000 prospective members to go at, what chance is there with a similar or larger number of isolated atoms? Local associations of course admit all members of the Society, and sometimes it may come about that the number of company men can almost overtop the remainder. In a few communities there might be a "whip up" at any time for any special purpose, and the proprietor pharmacists—disjointed atoms—might find themselves outvoted. As for any real sympathy between the sections (not to say friendship) it is, I venture to say, quite on the surface.—Yours, etc.,

LOOKER-ON (11/11).

### Technical Schools and Private Schools

SIR,—If, as is stated (*C. & D.*, November 2, p. 531), it is the policy of the Pharmaceutical Society to recognise more and more technical schools and colleges for both parts of the Qualifying examination, tending to what will probably lead to the extinction of proprietary schools of pharmacy, I for one do not consider that it will be altogether to the advantage of the students. Although I do not believe in a system of cramming for examinations, there is no doubt that the success or otherwise of a school of pharmacy depends largely on the number of successful candidates it can point to from its students, and therefore the necessity of preparing these students in such a manner as to be able to acquit themselves well in the examination-hall is always to the front. Not so, however, in a technical institute, which is often dependent largely on grants, the amount of which is regulated by the number of attendances. Moreover, in many of these technical schools pharmacy is only a part, and that a small part, of the subjects taught; the routine of the teaching has to be adapted to more than one future course of study, and is therefore not so advantageous to a budding pharmacist as a purely pharmaceutical school would be. In the private schools the lecturers and demonstrators are employed purposely for the work entailed and have to give their whole attention to it, while in an institute it may happen that the demonstrator is himself going in for a further examination, or some of the lecturers may have other occupations as well; if this were so, they could not give the pharmacy students the undivided attention they require.—Faithfully yours,

SCHOLASTIC (11/11).

### Compulsory Membership of Pharmaceutical Society

SIR,—If Mr. Guthrie's forecast of compulsory membership of the Pharmaceutical Society came to pass, it might not be such an advantageous matter as some members would have us believe. On the one hand, I feel that the 7,000 chemists on the Register who are not members should be brought into line so that the Society can really claim to be representative, and I do not see how this is to be done unless legally compulsory. On the other hand, if compulsory membership is also to give the Society any powers of penalising members or removing them from the Register for so-called unprofessional conduct, then I do not agree with it, bearing in mind cases which have occurred in the medical profession, unless there were very stringent safeguards to prevent unforeseen victimisation. But there is one point on which all pharmacists will be agreed, and that is that compulsory membership should also confer some real benefits on the pharmacist. If the Government were to take half the membership fee and leave the Society with the other half, then the very least they could do would be to guarantee the pharmacist the right to his calling, that is, the right to dispensing and to the sale of purely medicinal articles.—Yours truly,

COMPULSUM (12/11).

### Subscribers' Symposium

For interchange of opinion among "C. & D." readers and brief notes on business and practical topics

#### Wrong Method of Preparation

I understand that some chemists adopt the practice of diluting strong tincture of iodine when the weaker kind is required. Such a method is not correct; it will be seen on examination of the formula that more potassium iodide is necessary.—J. S. (29/10).



## Dispensing Notes and Difficulties

### A Troublesome Cream

STR.—Please inform me how to overcome the refractory behaviour of quinine acid hydrobromide in the following prescription:—

Stearic acid ... ..	10.0 parts
Sodium carbonate ... ..	1.5 part
Liquid paraffin ... ..	1.5 part
Acid hydrobromide of quinine (1—10 soln. w/w) ... ..	50 parts
Distilled water ... ..	to 100 parts

Melt the stearic acid in the liquid paraffin with the aid of heat. Dissolve the sodium carbonate in 25 parts of hot water and add this solution gradually to the melted stearic acid and liquid paraffin, stirring constantly. Make the weight of the product up to 40 parts with hot water. Make the weight of the quinine salt up to 60 parts with hot water; then stir in this quinine solution gradually, and beat into a foam when cold.

Yours truly,

A. B. (3/98).

[The only way is to proceed as you suggest, simplifying as far as possible the conversion of the quinine into the alkaloid so that it does not clot. The quinine ordered should have been the alkaloid and not the acid hydrobromide.]

### A Sulphur-Calamine Lotion

STR.—I should be obliged if you would tell me the best way of dispensing the following:—

Precipitated sulphur ... ..	30 gr.
Calamine ... ..	300 gr.
Zinc oxide ... ..	200 gr.
Glycerin ... ..	150m
Lime water ... ..	2½ oz.
Water ... ..	to make 10 oz.

Yours faithfully,

H. F. (4/10).

[The precipitated sulphur is mixed intimately with the calamine and zinc oxide, and the whole then rubbed down with the glycerin diluted with an equal quantity of water. This makes a stiff paste. Gradually add the lime water, thoroughly triturate in the mortar, and finally put into the bottle, adding water to wash out the creamy preparation until the quantity to fill the 10-oz. bottle is complete. In this way the sulphur is retained throughout the lotion when shaken, and settles down with the other powders when left standing.]

## Legal Queries

C. S. (6/11).—The inclusion of the word "catarrh" in the title, as well as the references to specific ailments on the label, render the article liable to medicine-stamp duty.

E. S. (6/11).—The use of the Royal Arms or arms so closely resembling them as to be calculated to deceive in connection with any business, calling or profession without authority renders the person liable to a fine, and any wrongful use of the Royal Arms is usually followed by prompt action on the part of the Royal Warrant Holders' Association.

M. T. (16/10).—Preparations containing more than 20 per cent. of chloroform come within Part II of the Poisons Schedule, and the proportion of chloroform present in the preparation, as well as the word "Poison" must appear on the label. On the other hand, if the mixture contains less than 20 per cent. of chloroform it would not come within Part II and, consequently, the amount of chloroform need not be given on the label.

G. R. (14/10).—The sale of spirituous medicinal preparations by persons other than registered chemists and druggists was dealt with editorially in our issue of January 19, 1929, p. 69. The law lays down that a spirit mixture, e.g., tincture of iodine, is to be regarded as spirits, and, as such, cannot be lawfully sold without a licence to sell spirits. Consequently, any person other than a chemist who wishes to sell spirituous medicinal preparations is required to hold an Excise licence to sell spirits by retail, and in addition a justice's licence.

## Miscellaneous Inquiries

When samples are sent particulars should be supplied to us, as to their origin, what they are, what they are used for, and how. We do not undertake to analyse and report upon proprietary articles nor to publish supposed formulas for them.

W. D. (31/108).—PRESCRIPTION PRICE.—According to the C. & D. Costing System the charge for the mixture should be 3s. 3d., as follows:—

	d.
Potas. cit. ... ..	5vj. 5.0
Tinct. hyos. ... ..	3j. 9.0
Syr. aurant. ... ..	5iss. 9.0
Inf. buchu ... ..	ad 5vj. 6.0
Container ... ..	2.0
Oncost ... ..	8.0
	39.0 = 3s. 3d.

B. C. (5/11).—COLOURING BILLIARD BALLS.—See C. & D., 1929, I, 184.

H. C. N. (10/10).—VANISHING CREAM.—The standard formula is:—

Ac. stearic. ... ..	3j.
Liq. ammon. fort. ... ..	viij.
Aq. dest. ... ..	3j.

The method of making should be strictly followed. Add the stearic acid to half the water and liquefy. Remove the source of heat and stir in quickly the remainder of the water to which has been added the ammonia. If it granulates, re-heat. Incorporate with the above cream:—

Sap. animalis ... ..	gr. x.
Aq. dest. ... ..	3j.

Dissolve and triturate for 10 to 15 minutes until a thin cream is produced. Allow to stand twenty-four hours for the sheen to develop. Repeated trituration may be necessary with non-crystalline stearic acid to develop the sheen. Add:—

Glycerin ... ..	xxx.
Muguet perfume ... ..	iv.

If the sheen is not desired, do not triturate. Packing of this cream requires more attention than is often given to it. Usually it is placed in jars where the lid fits loosely and the result is evaporation of the water and shrinkage follows. The best packing we have seen is in collapsible tubes. An alternative formula would be:—

Acid stearic. ... ..	3ij.
Sap. animalis ... ..	3iij.
Liq. ammon. fort. ... ..	xxl.
Aq. dest. ... ..	3x.

The complaint is made sometimes that ammonia causes discoloration of the cream, but this is scarcely a fact. The bad tinting of some creams is due to poor stearic acid. Only the best crystalline variety should be used.

Stripper (16/8).—PAINT AND VARNISH REMOVER.—This was found to be a highly inflammable mixture of acetone one part and benzol two parts, in which a little wax (in excess of that in solution) was suspended.

J. A. P. B. (13/9).—RED LOTION FOR CATTLE.—This is an orange-red liquid having a small deposit of sulphur and consisting of a solution of calcium polysulphides; s. g. 1.04.

## Retrospect of Fifty Years Ago

Reprinted from  
"The Chemist and Druggist," November 15, 1879  
Cutting Prices

We have before us testimony from all parts of the country of the rapid extension of the cutting system, chiefly in connection with proprietary medicines. . . . Traders who are satisfied with 5 or 10 per cent. profit commit no legal crime by selling their goods at that rate of profit, and those who are undersold must take the difficulties of competition as well as accept its benefits. We have never joined in the rabid abuse of all patent medicines. . . . At the same time . . . we do not think that chemists generally will be likely to encourage their sale when they find that about 1s. a dozen is all they are likely to get from them.





[Commenced C. &amp; D., July 5, 1924]

**Salt.**—In chemistry the name salt is applied to the product of the combination of an acid and a base with elimination of water. Salts are classified as normal, acid, basic, or double. Normal salts contain acidic and basic radicles in equivalent proportions. An acid salt contains hydrogen replaceable by a base to give the normal salt, and a basic salt contains a basic radicle which can be replaced by an acid to give a normal salt. Examples of these three types are sodium chloride,  $\text{NaCl}$ ; sodium acid phosphate,  $\text{NaH}_2\text{PO}_4$ ; bismuth subnitrate,  $\text{Bi}(\text{OH})_2\text{NO}_3$ . Double salts are formed by the union of simple salts in simple molecular proportions, but the term should not be applied to compounds which give reactions different from those of the constituent salts. Thus alum  $\text{K}_2\text{SO}_4\text{Al}_2(\text{SO}_4)_3\cdot 24\text{H}_2\text{O}$ , is a double salt, but potassium ferricyanide,  $\text{K}_3\text{FeC}_6\text{N}_6$ , is not.

**Salt-Cake.**—Salt-cake is the technical name for commercial anhydrous sodium sulphate, and the name is derived from the readiness with which it forms hard lumps. It was formerly manufactured in large quantities as an intermediate in the production of sodium carbonate by the Leblanc black ash process. It is now made chiefly for the sake of the hydrochloric acid which was formerly a waste product. In the Leblanc process common salt and sulphuric acid are heated in cast-iron pans. The first stage of the reaction results in the formation of sodium bisulphate  $\text{NaHSO}_4$ . This is raked on to the hearth of a reverberatory muffle furnace, or "blind roaster," in which the temperature is higher and the normal sulphate is formed. In order to prevent the escape of hydrochloric acid into the atmosphere if the muffle should crack, the pressure in the latter is kept lower than that in the flues. The cast-iron pans are slowly attacked by the acids, but should last for several thousand charges, about a dozen being worked a day. If iron-free saltcake is required lead pans must be employed. Another method used—the Hargreaves' process—avoids the use of sulphuric acid. Porous blocks of salt are treated with a mixture of air, steam and sulphur dioxide from pyrites burners. In the presence of ferric oxide or cupric oxide as catalyst, at a temperature of about  $500^\circ$ . The process of conversion to salt-cake is slow, occupying several days, but with careful control of the composition of the gas mixture and of the temperature the method yields a purer product. The following gives the average analyses of salt-cake from the two processes, omitting traces of moisture and silica:—

		$\text{NaSO}_4$	$\text{CaSO}_4$	$\text{FeSO}_4$	$\text{NaCl}$	$\text{SO}_3$
Blind roaster	..	94	1.1	0.7	2.6	0.9
Hargreaves	..	98	1.0	0.5	0.7	0.02

Salt-cake is used in the manufacture of glass and sodium carbonate.

**Salt of Lemon.**—This preparation is used as an iron-rust stain remover, and often consists of a mixture of acid potassium oxalate with acid potassium tartrate, with or without a trace of oil of lemon (see "Pharmaceutical Formulas," 8th ed., p. 361). Sal acetosella (q.v.) is also supplied. The origin of the name "salt of lemon" as applied to these preparations is unknown.

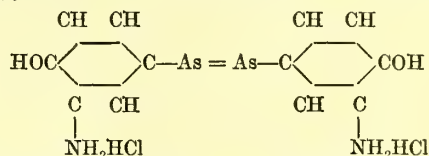
**Salt of Sorrel.**—A natural acid potassium oxalate occurring in common sorrel, *Rumex acetosa*, Linn., and in wood sorrel, *Oxalis Acetosella*, Linn. Salt of sorrel is in demand for the removing of iron-mould stains from linen, and acts by forming a soluble salt with

the ferric oxide. The artificial salt is usually supplied for this purpose. See Sal Acetosella.

**Saltpetre.**—See Sodium Nitrate.

**Salvage.**—In maritime law, salvage is the reward or compensation paid to those by whose efforts a ship or cargo is saved from damage or loss from shipwreck, fire, capture or other perils of the sea. Salvage is not payable for saving life at sea. The services for which salvage is claimed must be rendered voluntarily and involve the exercise of skill and the incurring of risk on the part of the salvors. In the absence of agreement between the parties concerned, the amount of salvage payable will be assessed by the Court having regard to the extent of the labour expended and the danger run by those claiming the reward. Salvors have a lien upon the property they have rescued for their remuneration. The crew of a ship are not entitled to salvage, as it is their duty to save the ship and cargo, if possible, in a time of emergency; but a passenger may have a right to salvage if by putting forward extraordinary efforts he helps materially in saving the ship or cargo. By common usage, the term "salvage" has come to be applied to the goods themselves that have been saved not only from loss at sea but also from destruction by fire, on land.

**Salvarsan.**—Ehrlich was led to the researches which culminated in the preparation of salvarsan by the belief that it should be possible to obtain poisonous drugs having a selective toxicity for a parasitic organism while exerting no harmful effects on the tissues of the host. It is noteworthy that salvarsan is not a substance of this type since it is without marked toxic effects on the spirochaetes of syphilis in vitro, and its specific action on protozoa in the body is dependent on the co-operation of the tissues of the patient. Salvarsan was the 606th organic arsenical to be prepared and tested by Ehrlich and his co-workers. It was introduced in 1910 under the name "606," which was soon superseded by "Salvarsan." Chemically it is 3:3' diamino-4:4' dihydroxyarsenobenzene dihydrochloride, and has the formula:



It is also known by the names arsenobenzol, diarsenol, arspenamine (U.S.P.), and by various proprietary titles. The name under the Therapeutic Substances Act is arsenobenzene. It is manufactured from phenol and arsenic oxide ( $\text{As}_2\text{O}_3$ ), which when heated together at  $150^\circ$  for four hours yield *p*-hydroxyphenyl arsenic acid. This is nitrated, and subsequently reduced under carefully controlled conditions so that two molecules of the nitrated phenyl arsenic acid unite to give one molecule of salvarsan base. The crude moist product is dissolved in methyl alcohol and the hydrochloride precipitated by adding successively, methyl alcohol saturated with hydrogen chloride, and then ether. Other methods for preparing the nitrated intermediate product are adopted by some makers. The usual reducing agent is sodium hyposulphite ( $\text{Na}_2\text{S}_2\text{O}_4$ ) in the presence of magnesium chloride, and great care has to be taken to avoid the production of toxic sulphonic derivatives. To avoid this risk the use of hypophosphorous acid as a reducing agent, or electrolytic reduction methods have been advocated. The product is stored in sealed glass tubes containing an inert gas, usually nitrogen or carbon dioxide which, while not entirely preventing oxidation, renders it sufficiently slow to avoid danger under normal circumstances. Salvarsan is a bright yellow, odourless, hygroscopic powder, crystallising with two molecules of water. It is soluble in water about 1 in 4, giving an acid solution; it also dissolves in alcohol and glycerine, but not in ether. Commercial samples vary slightly in composition—not only with different makers, but also with different batches from the same maker. It should contain theoretically 31.6 per cent. of arsenic. The U.S.P. requires an arsenic content of 30-32 per cent.,



# The C.&D. Commercial Compendium

while the Therapeutic Substances Act requires 30-34 per cent. The manufacture of the drug, and also its importation, labelling, sale, storage, toxicity, activity and composition are all controlled by regulations issued under the Therapeutic Substances Act, 1925. A sample of each batch made must be biologically tested in accordance with the regulations, and must be equal in therapeutic activity free from toxicity and to a standard sample of arsenobenzene kept in the National Institute for Medical Research, Hampstead. Further, it must answer to the tests for purity and stability given in S. R. & O., 1927, No. 486. Injections of salvarsan may be either intravenous or intramuscular. The latter method is said to be more effective, but as it is considerably more painful, administration by the intravenous route is more usual. Toxic symptoms are liable to follow the injection. Headache and vomiting are common, but not severe. Blindness and death have been reported in more severe cases of poisoning by the drug. To minimise these risks the injection must be prepared with the utmost care and with rigid adherence to a detailed technique. All water used in the preparation should be recently double, or even treble-distilled, and must be free from living and dead bacteria and their decomposition products. The acidity of the aqueous solution of the drug renders it unfit for injection, and it must first be rendered alkaline by the addition of sodium hydroxide solution. The neutral base is insoluble in water, and is precipitated by the alkali. Further addition produces the soluble mono- and di-sodium derivatives. The modern procedure is to add just sufficient alkali to convert completely into the unstable di-sodium derivative. Sodium chloride or glucose in sterile solution, may be added to the injection. The volume is adjusted to 100-200 c.c., according to the strength required, usually about 0.4 to 0.5 per cent. The average dose is from 0.3 to 0.6 gm., dosage and frequency of injection being controlled by the results of hepatic inefficiency tests. The injection should be given approximately at body temperature. In spite of every precaution, untoward results may occur in the most experienced hands. In general it may be said that too rapid injection, exposure of the solution to air, too low and too high a temperature are all likely to increase the risk. The commonest cause of mishap is probably the use of unsatisfactory distilled water. The trouble attending the preparation of the di-sodium derivative of salvarsan at the time of injection has led to the introduction of neo-salvarsan, also known as "914," novarsphenamine (U.S.P.X), and novarsenobenzene under the Therapeutic Substances Act. This substance is ready for injection on simple solution in sterile double-distilled water, and has largely replaced the original salvarsan. It is manufactured by precipitating salvarsan solution with sodium methanal sulphonylate, dissolving the precipitate in sodium carbonate, and re-precipitating with hydrochloric acid. Neo-salvarsan is the mono-sodium salt of the acid so formed. In freshly-prepared solution—an injection must be performed immediately solution is complete—this compound is less toxic than the parent compound, but owing to its smaller arsenic content, correspondingly larger doses, 0.6 to 0.9 gm., have to be given. The product supplied in commerce shows even greater variation in composition than salvarsan itself. The formula given above is that of the principal constituent; it is contaminated with small proportions of the compound having two formaldehyde sulphonylate groups, and with inorganic salts. Regulations under the Therapeutic Substances Act require an arsenic content of 18 to 21 per cent., while the U.S.P.X requires a minimum of 19 per cent. In addition to the tests for activity, toxicity and stability given above for salvarsan, it must answer to the chemical tests given in S.R. & O., 1927, No. 486. A third compound, closely related to neosalvarsan, is sulpharsenobenzene. This is formed from salvarsan by the substitution of each of the amino groups by  $\text{NH}-\text{CH}_2-\text{SO}_2\text{ONa}$ . The advantage of this substance is that it can be given intramuscularly, or even

hypodermically, and injections are comparatively painless. For these reasons it is preferred for administration to children. It is less toxic than other forms of the drug, but is also less effective. In addition to their main use as anti-syphilitic remedies, arsenobenzene and its congeners have been used also in the treatment of other diseases due to protozoal parasites. Excellent results have been obtained in yaws, frambæsia, and rat-bite fever.

**Salvarsan, Commerce.**—The following figures show the imports to and exports from Great Britain during the past five years:—

Imports					
From	1923	1924	1925	1926	1927
	Lb.	Lb.	Lb.	Lb.	Lb.
Germany .. ..	94	60	65	12	18
France .. ..	—	—	13	81	78
Other foreign countries	37	34	—	—	—
Total from foreign countries .. ..	131	94	78	93	96
Value .. .. £	2,814	2,278	2,900	6,878	7,700
Total from British countries (Canada) ..	—	—	3	11	11
Value .. .. £	—	—	226	1,144	270
Total .. ..	131	94	81	104	107
Value .. .. £	2,814	2,278	3,126	8,022	7,970

Exports					
To	1923	1924	1925	1926	1927
	Lb.	Lb.	Lb.	Lb.	Lb.
Total to foreign countries .. ..	3	516	26	49	12
Value .. .. £	405	562	283	1,373	1,024
Total to British countries .. ..	356	522	1,441	1,410	1,647
Value .. .. £	8,198	23,707	26,601	20,268	17,885
Total .. ..	359	1,038	1,467	1,459	1,659
Value .. .. £	8,603	24,269	26,884	21,641	18,909

**Salve.**—Since the beginning of the year 1923 the Board of Customs and Excise has regarded the word "salve" as involving liability to medicine-stamp duty when used on a label; such expressions as "lip-salve" must, therefore, fulfil the requirements of the Medicine Stamp Act, 1812, if exemption as a known, admitted, and approved remedy is claimed. The word occurs (in different spellings) in Anglo-Saxon, and has parallels in older languages in the O.E.D. In this country it has been used as a synonym for ointment, frequently but not invariably with the implication of healing properties.

**Salve Mulls.**—Preparations intermediate between ointments and plasters introduced by Mielcke, of Hamburg. Benzoated mutton suet is the principal fat used in making them, and the finished salve mulls (steatins) are spread on muslin in the proportion of 100 gm. to 1 metre  $\times$  20 cm. Several formulas are given in "Pharmaceutical Formulas," Vol. I, pp. 533-34.

**Salvia.**—See Sage.

**Samarium.**—The oxide of this rare-earth element was separated in 1879 by Lecocq de Boisbaudran from a mixture of several rare earths derived from samarskite, a mineral found in the Ural mountains and in North Carolina. The separation of the element in a pure state is effected, as for all rare-earth elements, by a tedious process of repeated fractional crystallisation. In this case the double salt formed with magnesium nitrate is recrystallised from nitric acid. The element itself, obtained by electrolysis of the fused chloride, is a pale grey, lustrous, brittle metal which rapidly becomes coated with a yellow layer of oxide when exposed to the air. It is the hardest metal of the cerium group of elements, being comparable in this respect to steel. The atomic weight is 150.4, s.g. 7.7, m.p. 1300-1400°. Numerous compounds have been prepared, in most of which the element is trivalent, e.g.,  $\text{SaCl}_3$ .

**Sambucus.**—See Elder Flowers.



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(C. & D., Nov. 9, p. 567.)

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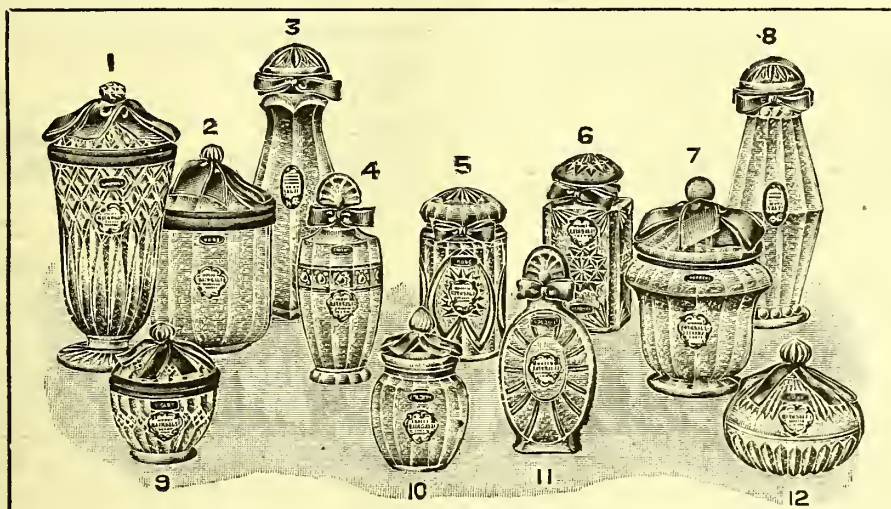
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Sole Export Agents—Wm. Alfred Jones, Limited, West India House, Liverpool.

## SALE or RETURN

**A SPECIAL OFFER TO CHEMISTS ONLY**

If you have not previously stocked "Menthells"—here is a special introductory offer for you:  
3 doz. tins carriage paid on sale or return. You pay for what you have sold at the end of March.  
Try this offer—display on your counter in the attractive outer and see how soon they sell.

# MENTHELLS

have a national reputation—constantly increasing sales during the last 25 years prove their merit. Retail 4½d. Cost 2/9 dozen. A bonus of 1 dozen on all orders for gross lots.  
Send a p.c. now to  
**BLYTON, ASTLEY & CO., Ltd.**  
Eagle Laboratories, Lower Broughton, Manchester

## Dr. BENGUÉ'S BALSAM

**RHEUMATISM, NEURALGIA, GOUT.**

**Dr. BENGUÉ'S ETHYL CHLORIDE.**  
**Dr. BENGUÉ'S DRAGÉES.—EUPURGO.**  
**PULMO (BAILLY).—FORXOL.—OPOBYL.**  
**ANESTILE.—NARCOTILE.—HEMOSTYL.**  
**LIPIODOL.—MUTHANOL.—ARHEMAPECTYL.**  
**ENTERO ANTIGENS.—STAPHYLOTHANOL.**  
**NEOPANCARPINE. RICARD'S CACHETS.**

**BENGUÉ & CO., LTD., MFG. CHEMISTS,**  
24 FITZROY STREET, LONDON, W.1.

"Multum in Parvo."

## "VAPOFORM" Disinfectant

Regd.

For disinfection of Rooms, Confined Spaces, &c.	for HOME and HOSPITAL	Has no injurious effects whatever on Furniture, Utensils, &c.
---	-----------------------	---

Small size, capable of disinfecting 1000 to 2000 cubic ft., 8/6 per doz.  
Large size, capable of disinfecting 3000 to 6000 cubic ft., 13/- per doz.

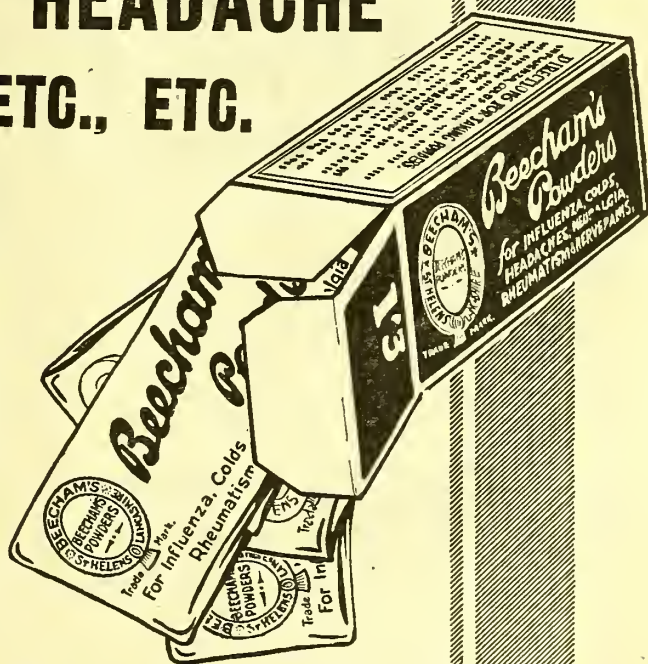
Sole Proprietors—  
**HARKNESS, BEAUMONT & CO., LTD.**  
Wholesale Chemists, EDINBURGH.



# REMEMBER!! BEECHAM'S POWDERS

are *now* the best  
selling winter powder for  
**COLDS, FLU', HEADACHE**  
**RHEUMATISM, ETC., ETC.**

Beecham's Powders are a most efficient and reliable remedy for Colds, Flu', Rheumatism, etc. They have a big demand during the winter months and chemists everywhere would be wise to keep adequate stocks of these powders always on hand. They are a quick selling line, and return a good profit on outlay. Beecham's Powders are protected by the P.A.T.A. and repay any selling co-operation extended to them. Continuous advertising ensures a constant demand.



Order through your wholesaler or direct from  
**BEECHAM'S PILLS LIMITED**  
**CHESTER ROAD, MANCHESTER**



CHILL WINDS are TRADE WINDS  
to the Chemist who Stocks

# IRVING'S Yeast-Vite TONIC TABLETS

OUR NATION-WIDE ADVERTISING is creating an unprecedented demand.

A well-known Manchester Chemist, when sending us a large order recently, writes as follows:—

"Might I mention at the same time that it is a pleasure to sell a line like yours which bears such a good profit and sells so freely."

**LOOK** at the profit on a Special 14 day Window Show Parcel. Sent Carriage Paid together with BONUS and FREE Display Material.

		COST.	SELLS.	
6 doz. 1/3 size @ 12/-	.. ..	£3 12 0	£4 10 0	} £5 PARCEL (P.A.T.A.)
1 " 3/- " @ 28/10	.. ..	1 8 10	1 16 0	
	.. ..	£5 0 10	£6 6 0	
BONUS 12 only 1/3	.. ..	free	15 0	
2 " 3/-	.. ..	free	6 0	} 46% PROFIT ON COST
30 days NETT	.. ..	£5 0 10	£7 7 0	
				30 days CREDIT
				PROFIT £2 6 2.

LATEST SHOW MATERIAL to link up with our huge Advertising sent FREE and POST FREE. State whether required for Small, Medium or Large Display.

**IMPORTANT.**—Our new Factory is in full swing, but we are taxed to the utmost in meeting all demands. Order NOW to avoid losing sales.

**IRVING'S YEAST-VITE, LTD., WATFORD, HERTS.**

Telephone:—WATFORD 1475 & 806 (5 lines).

Telegram: YEAST-VITE, WATFORD, HERTS.

**KEEP NONN TO THE FORE!**



Nonn sales are increasing everywhere and Chemists are co-operating with our advertising. Are you? If not, display Nonn in one of these attractive containers. It is worth the small space it occupies for Nonn is a big success and sells readily. So keep Nonn to the fore!

**Nonn FOR NERVES**  
**RESTORES SELF-CONFIDENCE**

Prices and Particulars:

NONN IS SUPPLIED IN RED CARTONS FOR MEN AND IN BLUE CARTONS FOR WOMEN

P.A.T.A. 1/3 per carton, Wholesale 11/3 per dozen  
P.A.T.A. 3/- per carton, Wholesale 27/- per dozen

Sole Distributors: Proprietors of Nonn Ltd.  
45 Gordon Square, London, W.C.

## Iglodine.

THE SAFE AND PURE ANTISEPTIC,

And its Kindred Preparations, are Dependable, Quick-selling and Profitable to the Chemist.

THEY SATISFY BUYERS AND BRING REPEAT ORDERS!

IGLODINE, the Ideal Home Healer, is Highly Recommended by the Medical Faculty, and Retail at 10d., 1/6 and 3/- per Bottle. IGLODINE Specialities include— EMBROCATION, TOILET SOAP, OINTMENT, CREAM, THROAT TABLETS, SUPPOSITORIES, SHAVING STICK, PASTILLES, NASAL DOUCHE, SALICYLATED: Also FIRST-AID OUTFITS.

P.A.T.A. Photo-Litho Showcards. Window Display Scheme. Particulars and Prices from

THE IGLODINE Co., Ltd., NEWCASTLE-ON-TYNE.

## BONUS OFFER

The Greatest Cough Cure in the World—

### "KOF-OH"

P.A.T.A.

1/3 size approx. 4½ fl. oz.	@ 12/- doz.	} nett 30 days
3/- " " 14 fl. oz.	@ 28/- "	
1/3 tin Tablets	@ 12/- "	

ORDERS of 3 doz. 1/3 or equivalent 4×1/3 free, 6 doz. or equivalent 9×1/3 free for 14 days' window display. Carriage paid. Packages free.

**KOF-OH CO., LTD.** Manufacturing Chemists **EVERTON, LIVERPOOL**



# Two more London Chemists testify to remarkable increasing demand for 'ASPRO'



**MARBLE ARCH PHARMACY**  
Proprietors: HYGIENIC STORES, LTD.  
ENGLISH & FOREIGN CHEMISTS,  
24 EDGWARE ROAD, W.2  
Telephone: PADDINGTON 7699.

27th April, 1929.

Dear Sirs,—Permit me to take this opportunity of telling you how satisfied I am with 'ASPRO' sales. I recommend it extensively to all my customers, as indeed do all my four assistants and we have yet to find a dissatisfied customer, or a case in which the desired relief from pain has not been obtained.

Our close proximity to Hyde Park has brought us experience that has taught us that 'ASPRO' is very well recommended for headaches caused by sun-glare, and for the normal day-trippers headache. In fact we confidently recommend 'ASPRO' in all those cases where the use of aspirin is indicated, and particularly in those cases where ordinary aspirin is not well tolerated.

Faithfully yours,

THE MARBLE ARCH PHARMACY.

## SALES DOUBLED with Current Window Display

**T. M. BLACK,** DISPENSING CHEMIST,  
160 Franciscan Road., Tooting, S.W.17

To 'ASPRO' Limited, Trading Estate, SLOUGH, Bucks.

Dear Sirs,—Just a line to let you know how pleased I am with the 'ASPRO' window show you sent me. The result since putting it in has been very marked—my sales have been more than doubled and the increase has been most marked in the 25's size.

There is no doubt in my mind that the policy of the chemist is to devote his window display to lines which are heavily advertised as yours is. It keeps a constant stream of purchasers coming into the shop which can be turned to good account for other lines stocked by us chemists.

Wishing you every success,

Yours faithfully,

THOMAS M. BLACK.

### BONUS ON 10's.

One Gross Order - Bonus 1 dozen packets.  
Half Gross Order - Bonus  $\frac{1}{2}$  dozen packets.  
Half gross 10's is minimum order accepted for Bonus purposes.

### NO BONUS ON 5's OR 60's.

**CONDITIONS.**—The conditions are, that upon receipt of each bonus the chemist undertakes to show 'ASPRO' Display matter in his shop window for 14 days, and to sell at advertised prices. Acceptance of bonus is considered as acceptance of these conditions. To qualify for the bonus it is not necessary for the chemist to buy both sizes at the same time but single lots may be ordered, viz., 6 doz. 10's or 3 doz. 27's.

SOLD IN 3d., 6d., 1/3 and 2/6 sizes with corresponding Wholesale prices of 2/3, 4/6, 11/6 and 21/- per dozen subject to 2½% discount 30 days.

### BONUS ON 27's.

One Gross Order - Bonus 2 dozen packets.  
Half Gross Order - Bonus 1 dozen packets  
Quarter Gross Order Bonus  $\frac{1}{2}$  dozen packets  
Quarter gross is minimum quantity.

## 'Aspro' Bonus System for Chemists gives Extra 17% Profit

Send for special window display and buy 'ASPRO' on exclusive bonus terms for chemists. Order through your Wholesaler. The bonus works out as follows:—

'ASPRO' consists of the purest Acetyl Salicylic Acid that has ever been known to Medical Science and its claims are based on its superiority.



Agents: **GOLLIN & Co. Pty. Ltd. ('ASPRO' Dept.), Slough, Bucks.**

No proprietary right is claimed in the method of manufacture or the formula.

'Phone: SLOUGH 603

Made by **ASPRO LIMITED, SLOUGH, ENGLAND.**

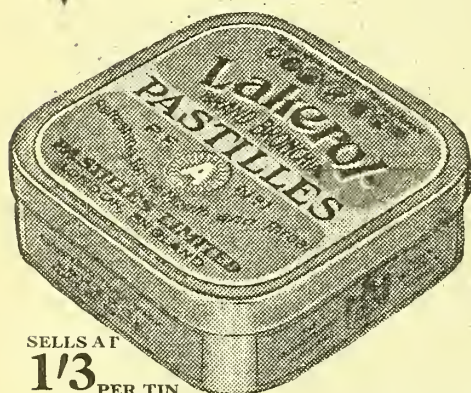


## TWO PACKINGS NOW TO SUIT EVERY CLASS OF CUSTOMER

The preference for Lakerol Pastilles is common to all classes, and for those who found the popular 1/3 tin a little too much for their needs, we have marketed the 7½d. packet, thus opening a much wider field of custom for you. Every customer at your shop is now a potential purchaser of Lakerol. It will profit you to push them.



SELLS AT  
**7½d.**  
PER PACKET



SELLS AT  
**1/3**  
PER TIN

### TRADE TERMS FOR BONUS PARCELS.

**1/3 Tins.**

Window Display Parcel No. 1 contains 3 dozen tins and a bonus of 6 tins.

Invoiced at £1-10-0—Sells at £2-12-6.

**7½d. Pkts.**

Window Display Parcel No. 1 contains 4 dozen packets and a bonus of 8 packets.

Invoiced at £1.—Sells at £1-15-0.

Profit on each equal to 75% on cost.

Attractive display material and a liberal supply of sample packets accompanies each parcel

PASTILLES LIMITED,

124 HIGH STREET, SHOREDITCH, LONDON, E.C.1.

# LAKEROL

BRAND

## BRONCHIAL PASTILLES

## A remarkable new BROMIDE and YEAST product

Here is a Bromide and Vegetable Yeast preparation entirely new to this country, which has an appetising taste and a high proportion of Yeast Vitamins. It is an excellent sedative in all cases of neurasthenia, nervous sleeplessness, neuralgia, physical excitement, etc., etc.

The price is 3/9 a bottle, containing 5 oz. Obtainable through all Wholesalers.

LIBERAL DISCOUNTS.

Full details from Sole Concessionaires for the United Kingdom and the Dominions:

COATES AND COOPER,

41 Great Tower St., London, E.C.3



# BROSEDAN

BRAND

## BROMIDE BOUILLON

Manufactured by The Temmler Chemical Works, Berlin

### OUR OBJECTIVES DOSAGE DISINTEGRATION DESPATCH WE ARE SPECIALISTS IN PILLS TABLETS LOZENGES

Customers' own ingredients made up—Private Formulas and Tradework executed

### GOOD WINTER LINES

#### COLD CURE TABLETS

(Aspirin, Caffein, Podophyllin, and Cinnamon) .. ..	25's.	50's.
ASPIRIN TABLETS ..	4/6 per doz.	8/- per doz.
	25's.	50's.
	3/9 per doz.	6/- per doz.
		100's.
		9/- per doz.

BALSAM OF ANISEED	2½ oz.	5 oz.
	4/6 per doz.	8/6 per doz.

THE WESTBOURNE PROPRIETARIES, Manufacturing Chemists,  
28 All Saints' Road, Westbourne Park, W.11.

# YADIL

The Antiseptic Certified Safe by Public Analysts and Pathologists for Internal and External Use.

The new popular priced sizes and widespread advertising of Yadil are speeding up sales—display it and get your share of the new business.

Retail prices: Liquid, 1/3; Yadilets, 1/3; Ointment, 1/3 per tin. There are larger sizes of all the above, and also Yadil Pastilles selling at 1/- per tin, and Yadil Soap 1/- per tablet.

YADIL PRODUCTS (1925) Ltd. Sicilian House, London, W.C.1



The illustration depicts a person from the chest down, wearing a dark, textured winter coat with a fur collar and light-colored gloves. The person's hands are positioned to showcase four different products from Parke, Davis & Co.:

- Top Left:** A hand holds a bottle of **EMULSION OF STANDARDISED COD LIVER OIL 33%**. The label also mentions "PARKE, DAVIS & CO. LONDON".
- Top Right:** A hand holds a box of **MENTHOLATED BRONCHIAL LOZENGES**. The label includes "PARKE, DAVIS & CO. LONDON".
- Bottom Left:** A hand holds a small bottle of **STANDARDISED COD-LIVER OIL**. The label also mentions "PARKE, DAVIS & CO. LONDON".
- Bottom Right:** A hand holds a bottle of **STIMULATING EMBROCATION**. The label includes "PARKE, DAVIS & CO. LONDON" and describes it as a "Soothing and Antiseptic" preparation.

Overlaid on the center of the illustration is the text:

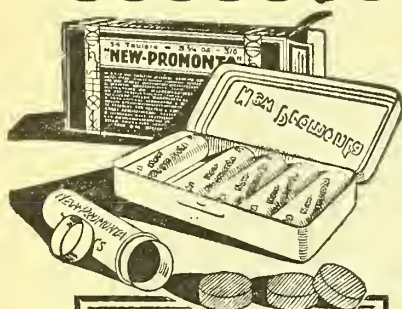
# Winter Lines Worth Handling

At the bottom of the advertisement, the text reads:

*Send for Terms*

PARKE, DAVIS & CO. BEAK STREET, LONDON, W.1





"NEW-PROMONTA" is prescribed and recommended by the Medical Profession.

"NEW-PROMONTA" is used in Hospitals and University Clinics.

"NEW-PROMONTA" gives tone and power to the Nervous System and the Brain.

"NEW-PROMONTA" increases the Appetite and aids Digestion.

"NEW-PROMONTA" enriches the Blood.

"NEW-PROMONTA" gives an increased vitality.

"NEW-PROMONTA" is extremely palatable to persons of all ages.

## A valuable tonic food for nerves & brain

The winter season is a particularly suitable time to stock and display "NEW-PROMONTA"—the scientific nerve food.

"NEW-PROMONTA" is a specific food for nervous disorders containing the actual Lipoids of the central nervous system in a highly concentrated and easily assimilable form. It contains in addition many valuable tonic nutritives, including Lime, Iron, Haemoglobin, Albumines, Carbo-Hydrates and Vitamins A, B, D and E.

### NEW-PROMONTA

A SCIENTIFIC FOOD FOR THE NERVOUS SYSTEM

In TABLET form "NEW-PROMONTA" is packed in flat metal boxes. An aluminium tube, which holds a day's supply, is included in every box.

In POWDER form "NEW-PROMONTA" is packed in handy sealed boxes of two sizes, containing  $\frac{1}{2}$  lb. and  $\frac{1}{4}$  lb. respectively.

PRICES (P.A.T.A.) for Great Britain and Ireland:—

POWDER—Boxes of  $\frac{1}{2}$  lb. net, 3/-; boxes of  $\frac{1}{4}$  lb. net, 5/6.

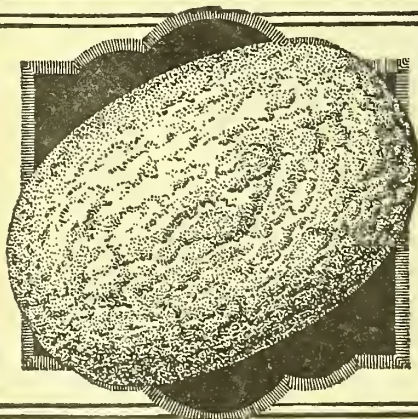
TABLETS—Boxes of 54, 3/6.

Obtainable from the principal wholesale Chemists and Sundries Houses.

PROMONTA COMPANY, LTD., Westmorland House, 127-131 Regent St., London, W.1

Telephone: Regent 7950.

Telegrams: Nupromonta, Piccy, London.



Two thirds  
actual size

## Bath Rusks

Unsolicited testimonials daily for Carrs famous Bath Rusks which are ideal for babies and young children. Scores of letters from grateful mothers. Recommended everywhere.

Made only by  
**CARR'S** of Carlisle

The Oldest House in the Trade

ESTABLISHED 1793.

The Best and Safest Infants' Medicine of over 130 years' standing.

**ATKINSON & BARKER'S**  
INFANTS' PRESERVATIVE

Does not contain any Scheduled Poison.

ROBERT BARKER & SON, LTD., 13 WESLEY STREET, C. on M., MANCHESTER





National Committee for  
Promoting the Consump-  
tion of Norwegian Cod  
Liver Oil, Bergen, Norway.

Ultraviolet radiation is sometimes tried to replace the lack of vitamins in food. It is not an economic way of attaining this result.

IN ITS REPORT FOR THE YEAR 1927-1928  
**the British Medical Research Council**  
STATES:

"The use of artificial light to supply only what the right food can give is merely wasteful. It commonly costs three or four shillings to give by light an effective supply of vitamin D that would cost less than a penny if given by the mouth in the form of cod-liver oil . . ."

Norwegian Cod Liver Oil abounds in natural vitamins. It is a natural food, supplying vitamins A and D, which is easily absorbed owing to its high percentage of glyceryl esters of unsaturated fatty acids. There is no efficient substitute for Cod Liver Oil.

A TEASPOONFUL OF  
NORWEGIAN COD  
LIVER OIL CONTAINS  
MORE VITAMINS THAN



ALL THE BUTTER AND  
MILK ANY INDIVI-  
DUAL CAN EAT AND  
DRINK IN A DAY

**NORWEGIAN COD LIVER OIL**



# CORNER'S OILS

The GREAT remedy for  
Accidents and Animal Ailments.

Protected Retail Price - - 2/9 per bottle.  
Wholesale - - - - - 24/- per doz.

P.A.T.A. Nett 1 month.

Carriage Paid on 3 dozen Lots.

EVANS, GADD & CO., LTD., having the  
sole proprietary rights in the above excellent  
and well-known article, are prepared to appoint  
Agents on liberal Terms.

For Window Show Terms, apply to

**EVANS, GADD & CO., LTD.**  
REDCLIFF STREET, BRISTOL, and FORE STREET, EXETER.



*The Original!  
and still the best*

Now is the time to review your  
Stocks of "O.A.P.'s" the Original  
Antiseptic Pastille, as prepared by  
Wm. Alfred Jones, late of the Liver-  
pool Throat Hospital.

In 1lb. and 4lb. tins (to  
retail at 5d. oz.)

3/4 per lb.

In 1/- pocket tins  
7/6 per doz.

Order NOW your winter supplies of :-

SAMPLE TINS  
ENVELOPES  
SHOWCARDS  
DISPLAY OUTERS  
BONUS FOR  
WINDOW DISPLAY



## O.A.P.'s

Sole  
Distributing  
Agents :-

WM. ALFRED JONES, Ltd.  
West India House, Liverpool.  
Wholesale Agents :-  
London : Thos. Hodgkinson,  
Frestons & King, 262 Bishop-  
gate, E.C.2. Bradford :  
Brook, Parker & Co., Ltd.  
Birmingham : A. S. Price & Co.,  
Ltd., Blackheath, Bath : Steel  
& Marsh, Milsom Street.

## THERMAL LINIMENT

A very warm and stimulating Liniment.



Nothing produced in  
the British Empire or in  
America can be found  
more effective and quick  
in its remedial action.

Put up in neat 3 oz.  
panelled bottles in showy  
cartons and with labels of  
a compelling character.

Retail  
1/3

Price 3 dozen  
8/6 8/-  
per Dozen per Dozen

Seller's name and address  
printed free on 3 dozen  
lots.

Apply -

**LOFTHOUSE & SALTMER, Ltd.**  
Wholesale Druggists  
**HULL**





**CORRUGATED  
PAPER IN  
BOXES·PIECES  
PARTITIONS  
CARTONS  
BOTTLE-  
WRAPPERS  
FOR ALL  
PURPOSES**

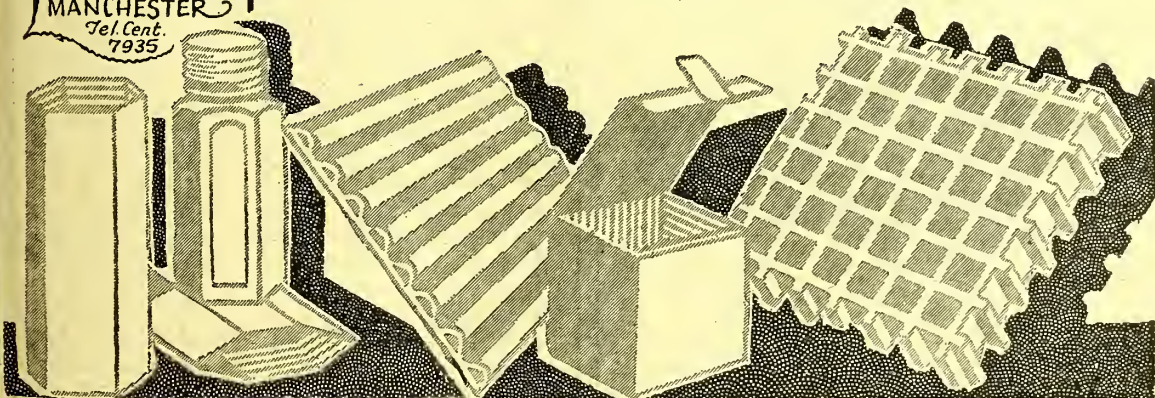


# **PACK IN SAFETY!**

*Write for Samples & Prices to*

**CORRUGATED PACKING  
MATERIALS · CO. LTD.  
4·AMBROSE ST. MANCHESTER**

LONDON  
REPRESENTATIVE  
FRANK·D·WELLER  
147 HOLBORN·EC1  
Tel. Holborn 7346  
NORTHERN  
REPRESENTATIVE·  
FRANK·D·WELLER  
55 MARKET STREET  
MANCHESTER  
*Tel. Cent.  
7935*





Acknowledged to be the  
best and most absorbent  
Rubber Sponge in the  
World.



### IT NEVER CRUMBLES

It provides  
The luxury of a sponge  
which is really hygienic,  
soft, free from grit, and  
durable.

Also

## SORBELLE

SORBELLE is the newer Sorbo range of Sponges, having all the Sorbo consistency and softness, but is offered at prices to meet foreign competition. Sorbelle, although offered at low prices, is nevertheless a GENUINE SORBO PRODUCT.

**Sorbo**  
TRADE MARK

Sole Manufacturers:  
Sorbo Rubber-Sponge Products  
Limited  
SORBO WORKS, WOKING, SURREY  
Phone: Woking 966 Grams: "Sorbo, Woking"

**"Surco"**

RELIABLE

**ELASTIC HOSIERY  
BODY BELTS  
TRUSSES  
SUNDRIES**

WRITE FOR CATALOGUE

**Surgical Hosiery Co., Ltd.**

RUSSELL STREET  
**NOTTINGHAM**

## SURGICAL DRESSINGS

of all kinds

ABSORBENT LINT  
BORIC LINT  
COTTON WOOL  
SURGICAL GAUZES  
BANDAGES  
GAUZE TISSUE  
CAPSICUM TISSUE  
SANITARY TOWELS



WHOLESALE AND EXPORT ONLY

ALL THE PROCESSES of manufacture, including Weaving, Bleaching, Raising, Medicating and Making-up are carried out in our own works

**VERNON & CO. LTD**


Manufacturers, Bleachers and Medicators of Surgical Dressings  
PENWORTHAM MILLS, PRESTON, LANCs



**Best sellers**  
The public is asking for **ZEAL** CLINICAL THERMOMETERS because they are:-  
**GUARANTEED TO STAY ACCURATE**  
**CONSISTENTLY ADVERTISED**

*Made by*  
**ZEAL**  
*-the name the public knows.*

**G. H. ZEAL, LTD.,**  
75 & 77, St. John St., London, E.C.1.



**A line that customers ask for by name**



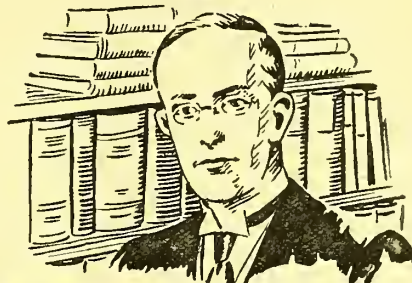
Doctors and nurses recommend "NORVIC" Crêpe Bandages for their dependability. They are well advertised and a small display will pay you handsomely.

**NORVIC**  
Blue Carton  
Crêpe Bandages

Full 33 1/3 % Profit. P. A. T. A.

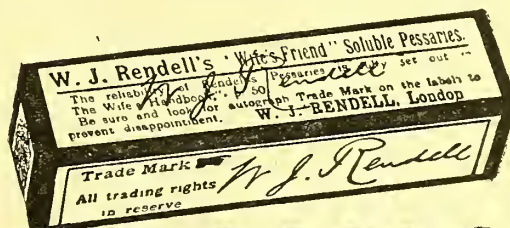
Stocked by all the leading wholesalers.  
Sole manufacturers: Grout & Co., Ltd., 35 Wood St., E.C.2.

**RENDELLISMS**  
**3**



**Authoritatively Recommended**

Medical practitioners have received no lack of proof during the past 50 years of the unfailing reliability and purity of Rendell's, which are always their first recommendation.



**RENDELL'S**  
**SOLUBLE QUININE PESSARIES**

Dignified display matter and interesting literature supplied free on application. Chemists everywhere find them unrivalled for making new customers—permanent, profitable ones. You can get Rendell's from your wholesaler to retail at 2/6 (P.A.T.A.) per box. Remember the public will not accept substitutes.

**W.J. RENDELL LTD.**

15, CHADWELL STREET, LONDON, E.C.1.





FAIRY DYES

IN  
30 SHADES

Have you got

## A FAIRY DYES' WINDOW CURTAIN?

Already throughout the country retail shops are displaying these window curtains to their great advantage. Not merely does it help them to sell Fairy Dyes and so add to their profit, it also forms a definite magnet of attraction and makes the passer-by stop and look in the window.

This is as it should be as Fairy Dyes want to help all round and while incidentally selling

more Fairy Dyes they want to see their customers prosper.

This is a helping hand—clasp it by sending to-day for a Fairy Dyes' window curtain.

It can be trimmed to fit your window and you will always be glad you took advantage of this offer. It comes to you free and post free, and is a gift you will really appreciate.

WELL ROAD,

GLASGOW

London Depot: 292 UPPER STREET, ISLINGTON, N.1.

# The New "T" Model Remington Portable

Possesses Special and Unique Features

1. Streamline body—beauty and great strength.
2. Type bars always in writing position.
3. Perfect visibility—no shadow on your work at any time.
4. Paper bail—holds paper tight to extreme bottom of page.
5. Carriage lock—protects machine from accident or misuse by others.
6. Margin release—on the keyboard.
7. Paragraph Key—makes neater work by indenting paragraphs uniformly—simple as a space bar, five times as fast—invaluable for tabulating.



Write for descriptive folder "D.C." and particulars of Deferred payment scheme.

CASH PRICE complete in case  
£14 : 14 : 0 or by Deferred Payments.

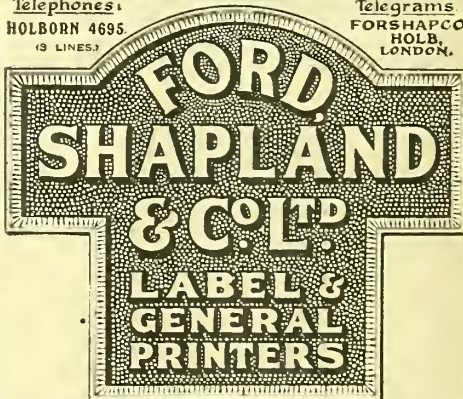
The REMINGTON TYPEWRITER Co. Ltd.

Head Office: 100 Gracechurch Street, E.C.3.

BRANCHES AND DEALERS EVERYWHERE.

Telephones:  
HOLBORN 4695.  
(9 LINES.)

Telegrams  
FORSHAPCO,  
HOLB.  
LONDON.



FINE ART SHOWCARDS, CARTONS,  
ENVELOPES FOR SHAMPOO POWDERS,  
CORN SILK, ETC.

"Sol-Vo" Sanitary Paper  
in Rolls & Packets.

AGENTS FOR THE REGISTRATION  
OF TRADE MARKS





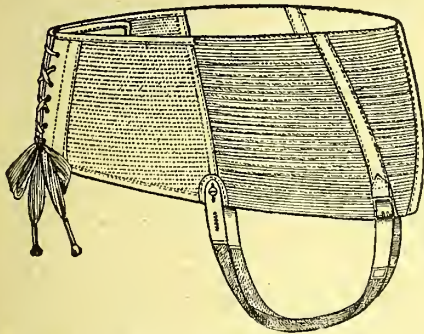
# The R. H. HEWARD CO.

SURGICAL APPLIANCE  
MANUFACTURERS,

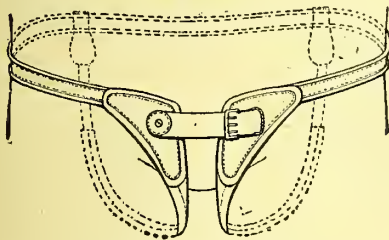
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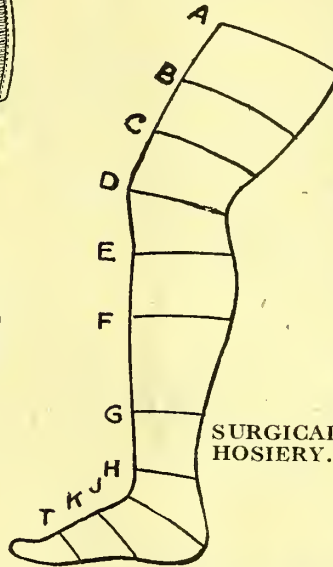
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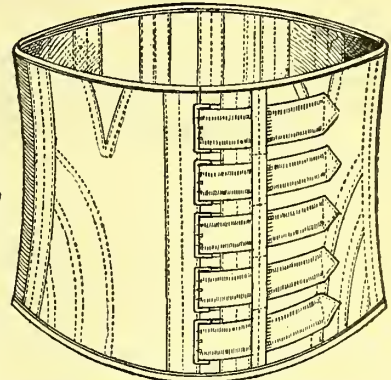
"PRINCESS" ELASTIC BELT.  
Fig. B450.



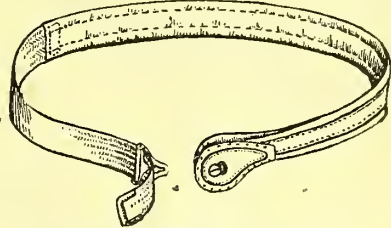
DOUBLE BUCKLED SCROTAL  
TRUSS. Fig. B1033.



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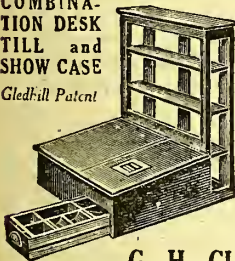
GENTLEMAN'S CORSET BELT.  
Fig. B609.



MINER'S TRUSS. Fig. B1053.

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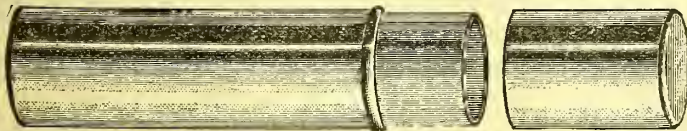
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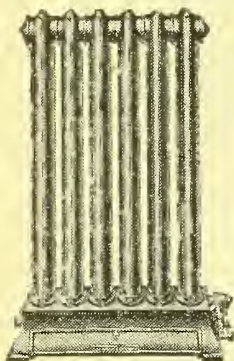
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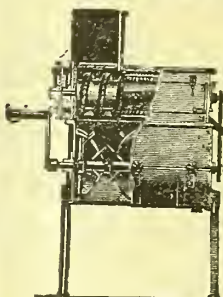
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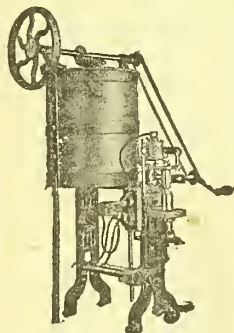
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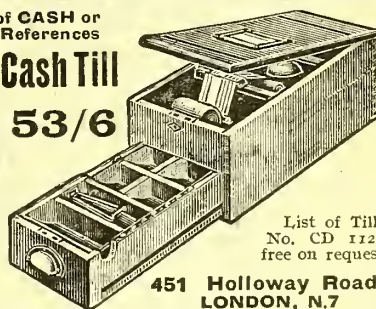
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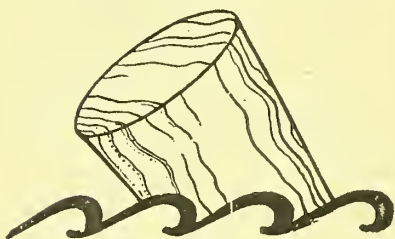
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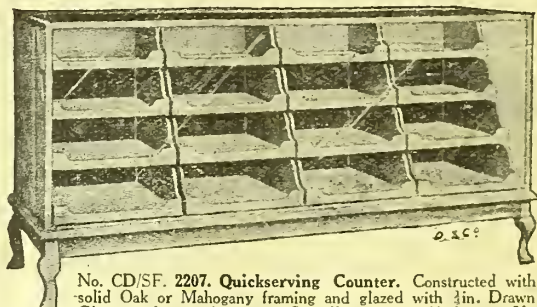
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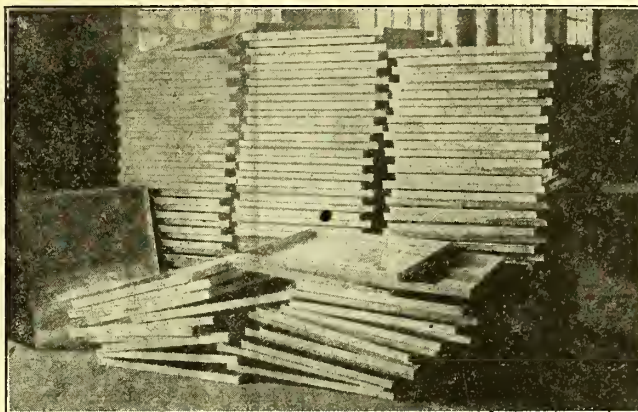
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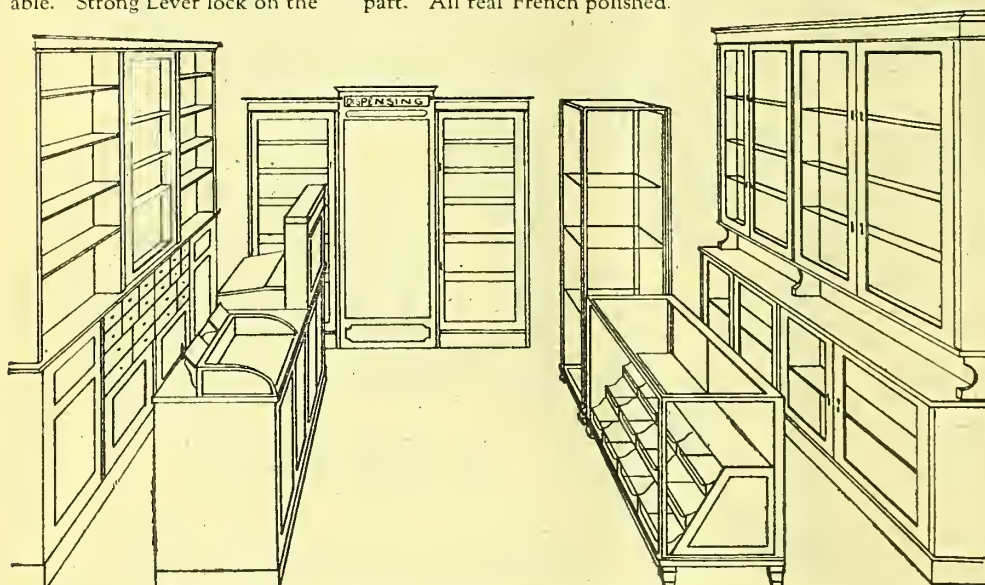
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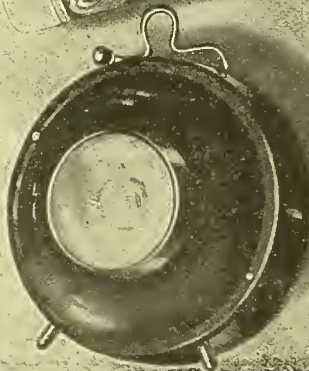
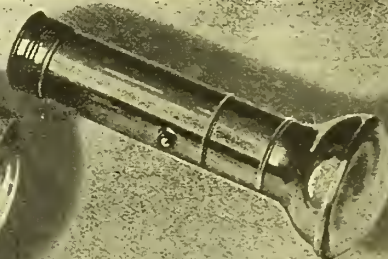
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# PURE ORANGE WINE

## A. MILLAR & CO., LTD., DUBLIN

(VINUM AURANTII B.P.)

Prepared in strict accordance with the Formula of the British Pharmacopœia.

(Wholesale only.)

Samples from Head Office, Thomas Street, DUBLIN, or London Office, 74 Great Tower Street, LONDON, E.C.3.



# HOW TO ASSESS THE VALUE OF ADVERTISING SCHEMES

## III

**Y**EAR by year, the public demand for advertised goods increases. Year by year it becomes more necessary for a retailer, before taking up new products, to assess the effectiveness of an advertising scheme—for on the effectiveness of this advertising depends the demand.

Clever advertisements will fail unless they appear in suitable newspapers and are accorded positions where they stand out clearly—The policy of the *Sunday Pictorial* is to limit the volume of advertising to approximately 25 per cent. of the total printing area (less than half that which many newspapers permit).

Thus there is no overcrowding and there is more certainty of every advertisement attracting attention. In addition, the *Sunday Pictorial* reaches a nation at rest and appeals to every member of the family. Its pictures, and many regular magazine features have won for it the gigantic Net Sale of more than TWO MILLION copies per issue; equal to reaching every fourth home in England.

Advertisements in the *Sunday Pictorial* impress the memory, for on Sunday the public have the time and inclination to read. Feature the goods which are advertised in its columns for it will be found that its selling influence extends for weeks afterwards.

### FREE OFFER

A map showing how the circulation of the *Sunday Pictorial* is distributed,

County by County throughout Great Britain, will be sent FREE on application. It shows dealers the splendid support the *Sunday Pictorial* can give advertised goods in their own locality.

The population in families is given in each district, and, in addition, the all-important "Penetration Factor," i.e., the proportion of families covered in each respective area. It is, in fact, the most interesting and informative business man's map which has ever been published.

Salesmen representing firms whose products are advertised in the "*Sunday Pictorial*" should send for a copy of our circulation distribution map. They will find it most useful in explaining to their customers the degree of support which their firms' advertisements are giving.

Enquiries, which should be made on business letter headings, should be addressed to S. D. Nicholls, Advertisement Manager, "*Sunday Pictorial*," Geraldine House, Fetter Lane, London, E.C.4. Telephone, Holborn 4321.

# SUNDAY PICTORIAL

## MORE THAN TWO MILLION A WEEK





the  
famous  
cold water  
dyes  
and the  
famous  
dye  
cabinet

If you have not yet received your FREE Auroral Cold Water Dye Cabinet—why not instal this wonderful Sales aid and Stock Keeper combined? This Cabinet is a Splendid counter attraction and greatly assists in keeping your stock of all Auroral Colours up-to-date. It is supplied FREE with one gross of

## Auroral Cold Water Dyes

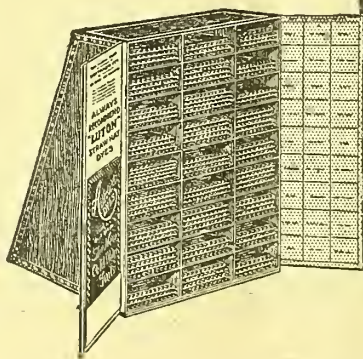
PRICES: 4/- per doz. packets

Retail P.A.T.A. 6d. per packet

5% Discount for Cash in seven days.

### FOR EXPORT

Oversea Buyers and Export Agents are invited to write for SPECIAL EXPORT Prices & Discounts. Note that a Special Non - Inflammable Series of LUTON STRAW HAT DYES is supplied for Export.



# Whitakers dyes for chemists

WHITAKER & CO. (Kendal) LTD., Dye Specialists for KENDAL  
Telegrams: "Dullette, Kendal." Established 1878. Chemists, Telephone: 214.

London Office and Showrooms:—179-185 GREAT PORTLAND STREET, W.1



# THE CHEMIST AND DRUGGIST SUPPLEMENT

42 CANNON ST.  
LONDON E.C.4

NOVEMBER 16, 1929

*This Supplement is inserted in every copy of The Chemist & Druggist.*

## THE SUPPLY OF SUPPLEMENTS

The clerical work in connection with the posting of spare copies of the Coloured Supplement week by week has increased to such an extent that we have been compelled to reorganise our system of distribution. Our readers will please note, therefore, that in future, instructions can be accepted for not more than six successive issues of the Supplement at a time, and that in every case the name and full postal address should be written on

**Post Office Wrappers, Stamped ONE PENNY, to ensure prompt delivery.**

**If wrappers bear a halfpenny stamp only, postal delivery is delayed.**

*Loose stamps will not be accepted.*

### CLOSING FOR PRESS.

MUST REACH US  
NOT LATER THAN

**FIRST POST THURSDAY MORNING.**

ALL ADVERTISEMENTS INTENDED FOR  
INSERTION IN THIS SUPPLEMENT

### CHEMISTS' TRANSFERS.

**Messrs. Orridge & Co., 56 Ludgate Hill, E.C.**

Telephone No.: CITY 2283.

May be consulted at their Offices on matters of Sale, Purchase and Valuation,

1.—LONDON, S.W.—Cash Retail Business in respectable working-class area; returns £1,200; scope for increase under younger man; net profit £324; attractive corner lock-up shop; rent £52 per annum, inclusive; held on lease; price £700.

2.—WANSTEAD (Near).—Corner shop in busy main thoroughfare; the business has been very much neglected, owing to the illness of the proprietor; under more energetic management and with modern ideas there is no doubt a considerable turnover could be done; the takings have been £2,500; further details on application.

3.—LONDON, S.E. (Modern Suburb).—Cash Retail Business, offering scope for N.H.I.; present returns £20 weekly; lock-up pharmacy with basement; rent £68; rates £26; sublet £34; price £750, of which sum £250 can remain.

4.—KENSINGTON.—High-class Retail and Dispensing Business with Kodak Agency; established many years; returns last year about £3,750, with gross profit over £1,400; estimated value of stock and fixtures £1,350; rent £220; held on lease; price £2,750; vendor has bought another business.

5.—CENTRAL LONDON.—General Retail Business, with Kodak Agency; returns, present rate, between £60 and £70 per week; attractive lock-up shop with good cellarage; long lease at reasonable rental; price £2,000; valuation terms entertained.

6.—DULWICH.—Cash Drug Store, in thickly populated district offering good scope for N.H.I.; established 30 years; returns £800 per annum; net profit 40 per cent.; stock and fixtures worth £450; small house with private entrance; rent £4 monthly; price £600.

7.—BERKS.—Old-established middle-class Retail and Dispensing Business, with Kodak Agency; returns last year £1,240, with net profit £443; double-fronted shop; estimated value of stock and fixtures £500; rent £72 per annum; sublet £104; private house available if required; price £850.

8.—WELSH COAST.—Old-established Business, Retail, Dispensing and Optical; the returns have been £2,800, but since the death of the proprietor have fallen to £1,700 under management; gross profit 40 per cent.; double-fronted shop, well fitted in mahogany; large house; private entrance; our client desires

an early sale and is willing to give consideration to any reasonable proposition.

9.—METROLAND.—Good-class Retail Business, with Kodak Agency; steadily increasing turnover, last year being £2,300; gross profit £1,014; corner shop, well fitted and stocked; part premises sub-let at £55 per annum, leaving flat vacant; the district is being developed, and as these premises occupy a commanding position, the business can be considerably improved; price £1,750; no offers.

10.—CORNISH RIVIERA.—Very old-established Business; returns, under management, £2,000 per annum; modern corner premises, recently rebuilt; the shop is well fitted and stocked; price, to include freehold, £3,500.

11.—BUCKS.—Modern General Retail Business in good market town; returns approach £40 weekly, with scope for increase; further details on application.

12.—SOUTHERN COUNTY (Modern Town).—Good-class Retail and Dispensing Business; returns last year £5,452; net profit over £1,500; estimated value of stock and fixtures £2,750; new lease; rent £350; price £2,750, plus stock at valuation.

13.—NORTH WALES.—Retail and Dispensing Business in centre of main street; returns, under management, £2,622, at good prices; single-fronted shop, extremely well fitted; latest valuation of stock £750; the freehold may be acquired for £1,750, or lease will be granted at £75; valuation terms entertained. Also Business, fully licensed for Wines, Spirits and Beer on or off premises; established a century; returns over £5,000; gross profit 30 per cent.; net £750; stock £750; fittings £750; immense possibilities; rent £150; or freehold £3,000; open eight hours daily; closed Sundays; price, apart from freehold, goodwill, £1,000, plus stock and fittings at valuation; or £5,500 all at; these businesses will be sold separately.

14.—SOUTHERN HEALTH RESORT.—General Retail Business, with Kodak Agency and Optical connection; established 1871; returns £3,800 per annum, of which sum £800 is Optical; audited accounts; double-fronted, corner shop; mahogany fittings; the premises, which are used entirely for business purposes, are held on lease at a rental of £80 per annum; private house available if required; price of business £3,000.

Messrs. O. & Co. desire to emphasize the necessity of a periodical Statement of Account by which means alone Profit, the Value of Business, &c., can be determined. Involving as this does the labour of Stocktaking and Valuation, it is often omitted and eventually becomes confusion and loss.

### Valuations for Stocktaking

Messrs. O. & Co. are prepared to undertake these essential duties and make Special Terms for such service.

**ORRIDGE & CO., 56 LUDGATE HILL, LONDON, E.C.4**



# BERDOE & FISH

CHEMISTS' VALUERS AND TRANSFER AGENTS,

41 Argyle Square, KING'S CROSS, W.C.1

(One minute from St. Pancras and King's Cross Stations.)

1.—BLACKPOOL.—Middle-class Cash Retail, with Kodak Agency; well established; returns average over £1,750; net profit £460; large shop with house attached; well stocked; price £900.

2.—DORSET COAST.—Light Retail Dispensing, with Kodak Agency; returns about £1,900; good position; modern pharmacy and house; price £1,100; freehold can be purchased.

3.—NORFOLK.—Old-established Retail, with Wines and Spirits, in prosperous market town; best position; returns £2,900; net profit £618; books audited; price £1,650.

4.—HERTS.—Unopposed light country Retail; easily worked; returns £2,100; net profit £620; owner retiring; price with freehold £2,500, or offer.

5.—KENT COAST.—Sound, progressive Light Cash Retail, with good Panel; returns over £1,500; net profit over £400; low rent; nice house and garden; illness necessitates sale; price £1,000, or offer.

6.—WEST OF ENGLAND.—Light Cash Retail, in prominent position of busy suburb; returns £1,200; rapidly increasing; modern fitted shop, fully stocked; good house; price £950.

7.—BUCKS.—Unopposed Chemist's, with Stationery and News-agency; return approach £2,400; net profit £600; low rent; on lease; house available; price £1,500, or offer.

8.—WEST MIDDLESEX.—Good-class Business, in fast growing residential district; returns £2,200; exceptional prospects; modern premises; stock and fixtures worth £1,200; price £1,750; strongly recommended.

9.—LONDON, W.—Good-class Cash Retail, in prominent position; returns £2,200; net profit £550; audited figures; £600 stock guaranteed; price £1,350.

10.—LONDON (Essex Suburb).—Light Family Retail, with Photographic and N.H.I.; no near opposition; returns £2,250; good house and pharmacy; well stocked; price £1,300.

11.—LONDON, S.W.—Good-class Light Suburban Retail, in good position; returns £25 to £30 weekly, increasing; smart pharmacy, well stocked; price £900, or valuation terms arranged.

## Stocktaking Valuations.

We are now booking dates for November onwards, and invite early application. Terms on application.

Estab. 1870.

Telephone: Terminus 3574.

# The Association of Manfg. Chemists, Ltd.

Business Agency, Transfer & Valuation Department

Head Offices—Kimberley House, Holborn Viaduct, London

E.C.1 (and at 2 Bixteth Street, Liverpool).

PARKIN S. BOOTH, Valuer.

Phone: City 1261-2-3

## BUSINESSES FOR DISPOSAL

1.—BERKS.—Double-fronted shop, well fitted in mahogany, held on lease with 7½ years to run at rental of £71 6s. 8d. per annum; returns £1,300 p.a.; excellent opening for Optics. Further particulars on application. (19)

2.—SURREY.—Situate on main London to Brighton road; lease will be granted at a rental of £104 per annum; has been very much neglected owing to illness; returns £19 per week; could be easily doubled with attention. Further particulars on application. (16)

3.—PORTSLADE.—For immediate disposal, Retail Family Dispensing Business, situate in fine position; premises consist of lock-up shop, held on lease with 18 years to run at a rental of £80 per annum; conveniently fitted; turnover recently averaged £40 per week, but has decreased owing to lack of capital; great scope and good business to be done with introduction of capital and personal supervision; any reasonable price accepted. Further particulars on application. (8)

4.—HENDON.—Retail Dispensing Business; on lease 17 years at £100 per annum inclusive (exception half water rate); a further rent of £1 per week for D. and P. room; returns £3,300; offers invited for goodwill, lease and fixtures; stock to be taken at valuation. Further particulars on application. (17)

5.—WILLESDEN.—Lock-up Shop; on lease 12 years at £100 per annum, inclusive; returns £1,800 per annum; offers invited for lease, fixtures and fittings; stock at valuation. Further particulars on application. (18)

FOR SALE, as a going concern, the business of Photographic Developers and Printers carried on by Forbest, Limited, at 17 Ambrose Street, Broughty Ferry, Dundee, including the heritable property in which the business is carried on and the whole machinery, plant, fittings and fixtures therein. There is a large turnover and part of the subjects are let to good tenants; assessed rental £127; feu duty £11 8s. 5d.; further particulars on application. (8)

Stocktaking and Valuation of Businesses undertaken at moderate inclusive fee. Chemists are invited to consult us in respect of their requirements in connection with sale or purchase of businesses. Chemists in the North are requested to communicate with our Liverpool Offices.

# ERNEST J. GEORGE

## STOCKTAKING BY EXPERIENCED STAFF

NORTH WALES.—Old-established Pharmacy in main street; ill-health cause of sale; stock and fittings about £900; price for quick sale £1,000; lease can be arranged.

DERBYSHIRE.—Good residential and visitors' town. Old-established Business, doing nearly £40 weekly; good net profits; stock £700; fixtures £300; purchase price £1,300.

SURREY.—High-class Family and Dispensing Business for Sale, doing about £80 per week, with valuable freehold property. Further details on application.

MAIN STREET (S.E.).—Store Business, with N.H.I., doing £1,750 per annum under management; splendid opportunity for "live" pharmacist; rent £150; 20 years' lease; good opening for Optics; price £1,200 (or near offer).

NORTH OF LONDON (10 miles Charing Cross).—Lock-up Pharmacy, doing about £37 weekly; under working proprietor will net about £375 per annum; stock £750; fittings £400; lease and goodwill £250.

## 3 ST. PAUL'S CLOSE, WALSALL

Phone: 3774.

## 34 MARKSBURY AVENUE, RICHMOND

Phone: 2210.

# CHARLES C. MARSDEN

Chemists' Valuer, Transfer Agent & Stocktaker,  
29 Oakwell Crescent, Oakwood, Leeds.

WEST RIDING.—Old estab. chemist, branch shop, good N.H.I. Doing £1,250 under manager, requires personal supervision. Price, value of S. & F., about £650. A smart Pharmacy, open two years in district, now being developed, price about £200, splendid opportunity for young man; similar one at £450, also one doing £1,400 at £700 and property £1,000.

## PREMISES FOR SALE.

MAIN road position in rapidly developing neighbourhood 4 Victoria Parade, Cranbrook Road, Ilford; single-fronted shop with imposing elevation; ample living accommodation and yard at rear, with entrance for vehicles; £1,475. Freehold (excluding shop front); liberal mortgage with easy terms of repayments arranged on request. Apply Suburban Development (London), Ltd., Estate Office, Perth Road, Ilford.

SPLENDID Shop Premises, with living rooms, on busy main road, Rickmansworth, in growing residential district. For Sale at £1,600 freehold; £100 down and balance less than rental; good opening for Chemist. Apply H. Gibson, Metropolitan Railway, Baker Street Station, N.W.1.

## PREMISES TO LET.

FENCHURCH STREET (Lloyds Avenue), in handsome new building.—Ground floor, about 3,900 ft., rent only 15s. per foot, including rates and taxes; also first floor, about 3,320 ft., rent 15s. 6d. per foot; and second floor (part), about 2,560 ft., rent 12s. per foot. Apply Jones, Lang & Co., 17 King Street Cheapside, E.C.

TO DENTAL SURGEONS OR DENTIST.—Exceptional opportunity occurs for starting a Practice; doctor has large partly furnished Room to let and share waiting room; terms very moderate. Apply, in first instance, "Surgeon," 85 Lillie Road Fulham.



## BUSINESSES FOR DISPOSAL.

6s. for 50 words or less; 6d. for every additional 10 words or less, prepaid.

The ADVERTISER may if preferred have replies addressed to this Office, and forwarded on payment of an additional charge of 1/-.

**BLACKPOOL.**—Good-class Business; busy main road; living accommodation attached; returns for the last two years £2,415 and £2,513 respectively; audited accounts;—rent £210 per annum; owner leaving town; stock and fixtures at valuation. Apply 169/20, Office of this Paper.

**BRITISH POSSESSION.**—Messrs. Orridge & Co. are instructed to dispose of a high-class Dispensing Business, with valuable Proprietaries and Tourists' trade; established over a century; net income after paying all expenses, including income tax, about £1,300 per annum; lock-up pharmacy; which is rented under very favourable conditions; the minimum price is £5,000, of which sum about £2,000 is for goodwill; possibly, £2,000 of the purchase price could remain.

**ESSEX COAST TOWN.**—Pharmacy, under unqualified management; must sell owing to indisposition; main road busy shopping centre; tram and bus stop; double-fronted, with good living accommodation; long lease; good variety of stock; modern fixtures and fittings; price, including stock and everything, £650, or any offer for quick sale. 403 London Road, Westcliff, Essex.

**ESSEX (Seaside Resort).**—Business and Property for Sale; takings average £25 weekly; Kodak Agency, N.H.I.; shop well fitted and stocked; price £200 goodwill; stock and fittings at valuation; property at valuation; liberal mortgage arranged. 170/15, Office of this Paper.

**GRIMSBY.**—Newly opened Pharmacy, beautifully fitted in oak; electric light, telephone; Kodak Agency; next door to popular restaurant; long lease; ample scope, but proprietor cannot give personal attention; under apprentice; has already done £22 weekly; lock-up shop; room above; opening for Optics; lease and fixtures £450; stock optional. Apply Cheetham, Bull Ring, Grimsby.

**HOLLINGWOOD (near Chesterfield).**—Recently established Branch Business on new estate; double-fronted shop, well fitted and stocked; modern house attached; N.H.I., Kodak; no near opposition; good reason for disposal; price, valuation stock and fittings. Apply Wood, Chemist, Eckington, near Sheffield.

**HOME COUNTY (About 20 Miles Out).**—Exceptional opportunity to secure good-class Family Retail and Dispensing Business through retirement; turnover £6,000, increasing; profits above average; very best position; good premises; will grant long lease; books audited; price £3,500 cash. Apply "Retiring," 160/647, Office of this Paper.

**LANCS (Seaside Resort).**—Lock-up corner shop in commanding position; well fitted and stocked; Kodak Agency, heavy D. & P. can be worked single-handed in winter; increasing returns £1,200; net profits £420; rent £85; long lease in trustee hands; price £250, plus stock and fixtures at valuation; good reason for disposal. 169/39, Office of this Paper.

**INCOLNSHIRE (In Good-class District).**—Light Retail; no near opposition; established 7 years; doing £1,500 at good profit; little N.H.I.; Kodak; gas and electric light; rent £26; opening for Optics; well stocked; sound reasons for sale; £650; best offer for quick sale, i.e., practically value of stock and fixtures. 150/35, Office of this Paper.

**LONDON, N.**—Handsome, large, double-fronted shop; beautifully fitted; splendidly stocked; main road; returns about 4,000 at full prices; long lease at moderate rental; premises could be purchased; would consider exchange for business at a South Coast seaside resort; bankers' references essential; price 4,000. 167/22, Office of this Paper.

**LONDON, N.W. (business centre).**—Old-established, well-fitted Pharmacy; returns over £2,500, under management; price £5,500. Further particulars of Evans Sons Lescher & Webb, d., 50 Bartholomew Close, London, E.C.1.

**LONDON, E.**—Lock-up shop, situated in main road; Kodak Agency; N.H.I.; neglected; returns £20 per week under management, capable of considerable increase; stock, fixtures, in price for quick sale, about £350, part of which could remain. Further particulars on application. 160/648, Office of this Paper.

**MIDLANDS.**—Drug Store for Sale; good prospects for qualified man; takings average the last 3 years over £1,200 per year (audited); no opposition; main road; price, including lock-up shop, ground, fixtures, etc., and £350 stock, £800; illness cause of sale. Apply C. R. Riddington, Accountant, 17 Highcross Street, Leicester.

**NORTH WALES.**—Chemist's Business for disposal; incoming moderate. Full details, Ayrton, Saunders & Co., Ltd., Liverpool.

**NORTH LONDON.**—Genuine offer to buyer with capital of £3,500; Dispensing and Family Business; very little N.H.I. Full particulars on receipt of banker's reference. 169/3, Office of this Paper.

**NORTH MIDLANDS TOWN.**—Chemist's (Store) Business; turnover £2,400; excellent position, busy thoroughfare; lock-up; lease at nominal rental; fairly heavy stock; very well fitted (modern); no heavy trade; own D. & P. equipment; large windows; price £1,500, or agreed sum for fixtures and goodwill plus s.a.v.; principals only; no triflers. 170/30, Office of this Paper.

**SKEGNESS.**—Newly opened Drug Store; opposite large hotel; ample scope, but proprietor cannot give personal attention; has already done a turnover by unqualified lady of £570 at good profits from May 17 to September 21; lease and fixtures £350; stock optional. Apply Cheetham, 1 High Street, Skegness.

**SURREY.**—Old-established, sound, progressive Business near Croydon for Sale by executors; price for freehold dwelling-house and shop, goodwill, heavy stock and fixtures about £4,500, or nearest offer; mortgage might be arranged, or might let on long lease. Apply Percy Holt, Solicitor, 2 Brighton Road, Purley.

**AVERAGE** turnover exceeds £3,000; net profit last year £700; business and freehold for sale on valuation terms; excellent position in a good town. 170/7, Office of this Paper.

**COUNTRY** Pharmacy, returning £25 per week; well fitted and stocked; capable of considerable extension under qualified management; long lease; low rent; owner retiring; price £850, or valuation. 167/11, Office of this Paper.

**DRUG** Stores for Sale; price £300, or near offer; established over 50 years; good living accommodation; first-class outlook for Panel Chemist; big residential neighbourhood. 169/37, Office of this Paper.

**DRUG** Stores, North London; lock-up; every convenience; low rent; stock and fixtures £150; own lines; Clubs; Photography; quick sale £300, or £200 down, balance later. P.C.B. 1/9, Office of this Paper.

**FINE** opportunity for young man to obtain a genuine Cash Business; returns over £1,000 yearly; good N.H.I.; reasons for disposal owner opening larger premises; only £400 required for goodwill, fixtures and stock, etc. Apply J. M. Clark, M.P.S., 70 Great Homer Street, Liverpool.

**FOR** Sale as a going concern, the Business and Goodwill of "Parsons' Phlegmo" (celebrated Cough Remedy), "Stomach Ease," "Sciatacura," and other lines; ample scope for greater development by progressive buyer; proprietor, 83, still manufacturing; sell outright or retain active interest. George Parsons, Blackhill, Durham.

**LIGHT** Retail and Dispensing Business, North London, doing about £24 per week, increasing; good-class trade; easily worked; scope for N.H.I. and Optics; rent £60; long lease; good stock; £700, or near offer. 169/35, Office of this Paper.

Price lists, trade circulars, samples, and printed matter can in no case be forwarded, the Box numbers being intended exclusively for specific answers to particular advertisements. The Publisher reserves the right to open and refuse to forward any communications received which he may consider contrary to this rule.



## BUSINESSES WANTED.

**PRIVATE** Chemist wishes to purchase now or at end of year a sound Business, not necessarily large, if rent and overhead charges are economical, leaving a fair living. Give, in confidence, essential general details, stating reasons for sale, length of lease, etc.; cash waiting; bankers' references given. 166/22, Office of this Paper.

**SCOTLAND** (preferred).—Sound little Business, doing between £1,000-£1,500, wanted soon; capital available; solicitor's reference applied; only genuine offerers; supply full particulars. "L," 162/29, Office of this Paper.

**WANTED** by Chemist now in South Africa, a sound and old-established Business, with turnover not less than £2,000 per annum, in the Isle of Wight or South Coast. Write, stating price, with fullest particulars and photograph of premises, 155/30, Office of this Paper.

**WE** are in a position to dispose of 10 Businesses showing a net profit of £500 per annum before January 1, 1930; London area preferred. Orridge & Co., 56 Ludgate Hill, E.C.4.

## AGENCIES.

**ARE** you a real Salesman or a "Traveller"? We have an opening for Midlands and South for sellers (only) selling not more than two firms' goods; our terms are a straight commission, and if successful and wanting whole-time terms can have them after proof within one month of selling ability with our Proprietary Specialities (two); state fullest details for selection; commission paid weekly. 159/640, Office of this Paper.

**TRAVELLERS** or Agents required to take up a profitable side line for Patented Surgical Appliance. Apply the Donovan Surgical Co., Ltd., Clock House, Barking, Essex.

## PATENT

**THE** owners of British Patent No. 263,092, for improvements in and relating to the treatment of fibrous material to render it proof against moth, are desirous of entering into negotiations with one or more firms in Great Britain for the purpose of exploiting the above invention, either by sale of the Patent Rights or by the grant of a Licence or Licences to manufacture on royalty. Inquiries should be addressed to Messrs. Abel & Imray, 30 Southampton Buildings, London, W.C.2.

## FINANCIAL.

**WHOLESALE** Manufacturing Business, Soaps, Perfumes, Toilet Creams, etc., requires additional capital for development; excellent opportunity for young Pharmacist. Full particulars upon application. Apply 167/14, Office of this Paper.

## SITUATIONS OPEN.

### RETAIL [HOME].

**BIRMINGHAM**.—Hedges (Chemists), Ltd., have vacancies for smart unqualified Assistants; experienced; good Window-dressers. Apply, with full particulars, to Managing Director, 10/12 Dale End, Birmingham.

**LEEDS**.—Reynolds & Branson, Ltd., require for a short term an Improver or Junior.

**LONDON**.—Unqualified lady Assistant required after Christmas; knowledge of Dispensing and Counter trade; references, salary, etc.; permanency. 164/12, Office of this Paper.

**ASSISTANT**, part-time (male), evenings and Saturday. Apply C. Dickinson, 119 South End, Croydon.

**A** GOOD opportunity for a man of ability and experience; £4 10s. and commission; should take £6 at least if capable of gaining confidence of customers; figures open for inspection. Please give age, height and experience. 169/19, Office of this Paper.

**CAPABLE** Window-dresser, accustomed to good-class Retail business; permanency. State fullest particulars of experience, age, and salary required to "Bonus," 167/34, Office of this Paper.

**CAPABLE** Junior required, just out of apprenticeship and requiring 12 months' extra experience before qualifying; Dispensing and Counter work. Apply, by letter, giving full particulars and salary required, to E. Moss, Bedford Lane, Fitcham, Middlesex.

### POPLAR HOSPITAL FOR ACCIDENTS,

East India Dock Road, E.14,  
requires the services of a full-time  
DISPENSER.

Applications, stating name, age, salary required, experience, and enclosing not more than three testimonials, to be addressed to the House Governor and Secretary, not later than November 30.

(Signed) D. H. LINDSAY,  
House Governor and Secretary.

**CAPABLE** Assistant wanted (male); accustomed to first-class Dispensing business; must possess undeniable references. Apply with full particulars of experience, age, height, etc., to H. J. Perrett, 90 Victoria Street, Westminster, S.W.

**GIRL** required, age 17 or 18 years, for business in N.W. London; experienced in sale of Toilet Requisites, Patent Medicines and Photographic Goods. Reply, stating salary required, to 169/1, Office of this Paper.

**IMPROVER** (male) required at once for middle-class suburban business; outdoors. Kindly state age, height, experience and salary by letter only, to R. J. H. Weatherill, Pharmacist, 73 Springbank Road, Lewisham, S.E.13.

**JUNIOR** Assistant, for wealthy residential neighbourhood, to put up high-class Medical and Toilet Proprietaries, assist and gain experience in Dispensing, but not N.H.I. Prescribing; no counter work, nor photography, etc.; must have served an apprenticeship in a high-class pharmacy; hours 9 a.m. to 6 p.m. Apply, by letter only, "K," c/o J. Egan, Fleet Street, Liverpool.

**PART-TIME**.—Qualified man wanted by West-End Chemist for relief; one with a "bee in his bonnet" could have sole use of basement for development of his own business idea in return for his services. Apply 170/18, Office of this Paper.

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